# **UNITED STATES** SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

|              | FORM 20-F  |
|--------------|--|
| (Mark        | One)   |
|              | REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934   |
|              | OR   |
|              | ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE FISCAL YEAR ENDED DECEMBER 31, 2017                                       |
|              | OR   |
|              | TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934   |
|              | OR   |
|              | SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  |
| DATE         | OF EVENT REQUIRING THIS SHELL COMPANY REPORT   |
|              | FOR THE TRANSACTION PERIOD FORM TO   |
| COMN         | MISSION FILE NUMBER 1-15138  |
|              | 中国石油化工股份有限公司 CHINA PETROLEUM & CHEMICAL CORPORATION (Exact name of Registrant as specified in its charter)   |
|              | The People's Republic of China   |
|              | (Jurisdiction of incorporation or organization)  |
|              | 22 Chaoyangmen North Street<br>Chaoyang District, Beijing, 100728<br>The People's Republic of China  |
|              | (Address of principal executive offices)   |
|              | Mr. Huang Wensheng 22 Chaoyangmen North Street Chaoyang District, Beijing, 100728 The People's Republic of China Tel: +86 (10) 5996 0028 Fax: +86 (10) 5996 0386       |
|              | (Name, Telephone, Email and/or Facsimile number and Address of Company Contact Person)   |
| Securit      | ties registered or to be registered pursuant to Section 12(b) of the Act.  |
|              | Title of Each Class  Name of Each Exchange On Which Registered   |
|              | American Depositary Shares, each representing 100 H Shares of  |
|              | par value RMB 1.00 per share  H Shares of par value RMB 1.00 per share  New York Stock Exchange, Inc.  New York Stock Exchange, Inc.*                                  |
| *<br>Securit | Not for trading, but only in connection with the registration of American Depository Shares. ties registered or to be registered pursuant to Section 12(g) of the Act. |
|              | None<br>(Title of Class)   |
|              | (Title of Class)   |

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.

|   |                                   | None<br>of Class)  |   |  |  |
|---|-----------------------------------|--|---|--|--|
|   | •                                 | e of Class)  |   |  |  |
| Indicate the number of outstanding covered by the annual report.  |                                   | -  | k as of the close of the period   |  |  |
| H Shares, par value RMB 1.00 per  |                                   | 25,513,438,600   |   |  |  |
| A Shares, par value RMB 1.00 per  | share                             | 95,557,771,046   |   |  |  |
| Indicate by check mark if the regis   | trant is a well-known seasoned    | d issuer, as defined in Rule 405 of                      | the Securities Act.   |  |  |
| If this report is an annual or transit<br>Section 13 or 15(d) of the Securitie  |                                   | nark if the registrant is not require                    | d to file reports pursuant to   |  |  |
| Section 15 of 15(a) of the Security   | is Englange flet of 193 i.        |  | ☐ Yes 区 No  |  |  |
| Note — Checking the box above w<br>Exchange Act of 1934 from their of   |                                   |  | Section 13 or 15(d) of the Securities                                   |  |  |
| Indicate by check mark whether th<br>Exchange Act of 1934 during the p<br>and (2) has been subject to such fil  | preceding 12 months (or for su    | ch shorter period that the Registra                      | on 13 or 15(d) of the Securities nt was required to file such reports), |  |  |
| and (2) has been subject to such in   | ing requirements for the past s   | ou days.   | ĭ Yes □ No  |  |  |
| Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if at Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this corporate preceding 12 months (or for such shorter period that the registrant was required to submit and post such files) |                                   |  |   |  |  |
| preceding 12 months (or for such s  | morter period that the registral  | it was required to submit and post                       | × Yes □ No  |  |  |
| Indicate by check mark whether th of "accelerated filer and large acce  |                                   |  | non-accelerated filer. See definition                                   |  |  |
| Large accelerated filer ⊠   | Accelerated filer □               | Non-accelerated filer □                                  | Emerging growth company □   |  |  |
| If an emerging growth company th registrant has elected not to use the provided pursuant to Section 13(a)   | extended transition period for    |  | AP, indicate by check mark if the sed financial accounting standards†   |  |  |
| † The term "new or revised financi its Accounting Standards Codificat   |                                   | to any update issued by the Finan                        | icial Accounting Standards Board to                                     |  |  |
| Indicate by check mark which basi   | s of accounting the registrant l  | has used to prepare the financial st                     | tatements included in this filing:                                      |  |  |
| U.S. GAAP □   |                                   | Reporting Standards as issued counting Standards Board ⊠ | Other □   |  |  |
| If "Other" has been checked in resp<br>has elected to follow.   | ponse to the previous question    | , indicate by check mark which fin                       | nancial statement item the registrant                                   |  |  |
| has elected to follow.  |                                   |  | ☐ Item 17 ☐ Item 18   |  |  |
| If this is an annual report, indicate Act).   | by check mark whether the reg     | gistrant is a shell company (as def                      | ined in Rule 12b-2 of the Exchange                                      |  |  |
| ,   |                                   |  | ☐ Yes ⊠ No  |  |  |
| (APPLICABLE ONLY TO ISSUE   | RS INVOLVED IN BANKRI             | UPTCY PROCEEDINGS DURIN                                  | G THE PAST FIVE YEARS)  |  |  |
| Indicate by check mark whether th<br>Securities Exchange Act of 1934 s  |                                   |  | ed by Section 12, 13 or 15(d) of the d by a court. *                    |  |  |
|   |                                   |  | □ Yes □ No  |  |  |
| * This requirement does no  | ot apply to the registrant in res | pect of this filing.                                     |   |  |  |

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#### **CERTAIN TERMS AND CONVENTIONS**

#### **Definitions**

Unless the context otherwise requires, references in this annual report to:

- "Sinopec Corp.", "Company", "we", "our" and "us" are to China Petroleum & Chemical Corporation, a PRC joint stock limited company, and its subsidiaries;
- "Sinopec Group Company" are to our controlling shareholder, China Petrochemical Corporation, a PRC limited liability company;
- "Sinopec Group" are to the Sinopec Group Company and its subsidiaries other than Sinopec Corp. and its subsidiaries;
- "provinces" are to provinces and to provincial-level autonomous regions and municipalities in China which are directly under the supervision of the central PRC government;
- "RMB" are to Renminbi, the currency of the PRC;
- "HK\$" are to Hong Kong dollar, the currency of the Hong Kong Special Administrative Region of the PRC; and
- "US\$" are to US dollars, the currency of the United States of America.

#### **Conversion Conventions**

Unless otherwise specified, conversion of crude oil from tonnes to barrels are made at a rate of one tonne to 7.10 barrels for crude oil we produced domestically and one tonne to 7.21, 7.20 and 7.21 barrels for the years ended December 31, 2015, 2016 and 2017, respectively for crude oil we produced overseas. Conversions of natural gas from cubic meters to cubic feet are made at a rate of one cubic meter to 35.31 cubic feet; and 6,000 cubic feet of natural gas is converted to one BOE.

#### **Glossary of Technical Terms**

Unless otherwise indicated in the context, references to:

- "BOE" are to barrels-of-oil equivalent.
- "primary distillation capacity" are to the crude oil throughput capacity of a refinery's crude oil distillation units, calculated by estimating the number of days in a year that such crude oil distillation units are expected to operate, excluding downtime for regular maintenance, and multiplying that number by the amount equal to the units' optimal daily crude oil throughput.
- "rated capacity" are to the output capacity of a given production unit or, where appropriate, the throughput capacity, calculated by estimating the number of days in a year that such production unit is expected to operate, excluding downtime for regular maintenance, and multiplying that number by an amount equal to the unit's optimal daily output or throughput, as the case may be.

# **CURRENCIES AND EXCHANGE RATES**

We publish our financial statements in Renminbi. Unless otherwise indicated, all translations from Renminbi to US dollars were made at the averages of mid-point exchange rates of Renminbi as published by the PRC State Administration of Foreign Exchange (SAFE) for the past five years.

The following table sets forth the noon buying rate for US dollars in Renminbi for the periods indicated, as provided by the H.10 statistical release of the U.S. Federal Reserve Board. We do not represent that Renminbi or US dollar amounts could be converted into US dollars or Renminbi, as the case may be, at any particular rate, the rates below or at all. On April 20, 2018, the noon buying rate was RMB 6.2945 to US\$1.00.

|                                     |        | Noon Buying            | Rate <sup>(1)</sup> |        |
|-------------------------------------|--------|------------------------|---------------------|--------|
| Period                              | End    | Average <sup>(2)</sup> | High                | Low    |
|                                     |        | (RMB per U             | S\$1.00)            |        |
| 2013                                | 6.0537 | 6.1412                 | 6.2438              | 6.0537 |
| 2014                                | 6.2046 | 6.1704                 | 6.2591              | 6.0402 |
| 2015                                | 6.4778 | 6.2869                 | 6.4896              | 6.1870 |
| 2016                                | 6.9430 | 6.6549                 | 6.9580              | 6.4480 |
| 2017                                | 6.5063 | 6.7350                 | 6.9575              | 6.4773 |
| October 2017                        | 6.6328 | 6.6254                 | 6.6533              | 6.5712 |
| November 2017                       | 6.6090 | 6.6200                 | 6.6385              | 6.5967 |
| December 2017                       | 6.5063 | 6.5932                 | 6.6210              | 6.5063 |
| January 2018                        | 6.2841 | 6.4233                 | 6.5263              | 6.2841 |
| February 2018                       | 6.3280 | 6.3183                 | 6.3471              | 6.2649 |
| March 2018                          | 6.2726 | 6.3174                 | 6.3565              | 6.2685 |
| April 2018 (through April 20, 2018) | 6.2945 | 6.2859                 | 6.3045              | 6.2655 |

<sup>(1)</sup> The exchange rates reflect those set forth in the H.10 statistical release of the U.S. Federal Reserve Board.

### FORWARD-LOOKING STATEMENTS

This annual report includes "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical facts, included in this annual report that address activities, events or developments which we expect or anticipate will or may occur in the future are hereby identified as forward-looking statements for the purpose of the safe harbor provided by Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. The words such as believe, intend, expect, anticipate, project, estimate, predict, plan and similar expressions are also intended to identify forward-looking statements. These forward-looking statements address, among others, such issues as:

- amount and nature of future exploration and development,
- future prices of and demand for our products,
- future earnings and cash flow,
- development projects and drilling prospects,
- future plans and capital expenditures,
- estimates of proved oil and gas reserves,
- exploration prospects and reserves potential,
- expansion and other development trends of the petroleum and petrochemical industry,
- production forecasts of oil and gas,
- expected production or processing capacities, including expected rated capacities and primary distillation capacities, of units or facilities not yet in operation,

<sup>(2)</sup> Annual averages are determined by averaging the rates on the last business day of each month during the relevant period. Monthly averages are calculated using the average of the daily rates during the relevant period.

- · expansion and growth of our business and operations, and
- our prospective operational and financial information.

These statements are based on assumptions and analyses made by us in light of our experience and perception of historical trends, current conditions and expected future developments, as well as other factors we believe are appropriate in particular circumstances. However, whether actual results and developments will meet our expectations and predictions depends on a number of risks and uncertainties which could cause actual results to differ materially from our expectations, including the risks set forth in "Item 3. Key Information — Risk Factors" and the following:

- fluctuations in crude oil and natural gas prices,
- fluctuations in prices of our refined oil and chemical products,
- failures or delays in achieving production from development projects,
- potential acquisitions and other business opportunities,
- general economic, market and business conditions, and
- other risks and factors beyond our control.

Consequently, all of the forward-looking statements made in this annual report are qualified by these cautionary statements and readers are cautioned not to place undue reliance on these forward-looking statements. These forward-looking statements should be considered in light of the various important factors set forth above and elsewhere in this Form 20-F. In addition, we cannot assure you that the actual results or developments anticipated by us will be realized or, even if substantially realized, that they will have the expected effect on us or our business or operations.

#### ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISORS

Not applicable

#### ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

# ITEM 3. KEY INFORMATION

#### A. SELECTED FINANCIAL DATA

The selected consolidated statement of income data (except per ADS data) and consolidated cash flows data for the years ended December 31, 2015, 2016 and 2017, and the selected consolidated balance sheet data as of December 31, 2016 and 2017 are derived from, and should be read in conjunction with, the audited consolidated financial statements included elsewhere in this annual report. The selected consolidated statement of income data (except per ADS data) and consolidated cash flows data for the years ended December 31, 2013 and 2014 and the selected consolidated balance sheet data as of December 31, 2013, 2014 and 2015 are derived from our audited consolidated financial statements which are not included elsewhere in this annual report.

Moreover, the selected financial data should be read in conjunction with our consolidated financial statements and "Item 5. Operating and Financial Review and Prospects" included elsewhere in this annual report. Our consolidated financial statements are prepared and presented in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board.

|   |                 | Ye                       | ar Ended December 3   | 1,                    |                 |
|---|-----------------|--------------------------|-----------------------|-----------------------|-----------------|
|   | 2013            | 2014                     | 2015                  | 2016                  | 2017            |
|   | (RN             | IB in millions, except p | per share, per ADS da | ta and number of shar | es)             |
| Consolidated Statement of Income          |                 |                          |                       |                       |                 |
| Data <sup>(1)</sup> :                     | 2 001 020       | 2.025.566                | 2 020 255             | 1 020 011             | 2.260.102       |
| Operating revenues                        | 2,881,928       | 2,827,566                | 2,020,375             | 1,930,911             | 2,360,193       |
| Operating expenses                        | (2,785,165)     |                          |                       |                       |                 |
| Operating income                          | 96,763          | 73,439                   | 56,822                | 77,193                | 71,470          |
| Earnings before income tax                | 95,444          | 65,818                   | 56,411                | 80,151                | 86,697          |
| Tax expense                               | (24,763)        | (17,571)                 | (12,613)              | (20,707)              | (16,279)        |
| Net income attributable to equity         |                 |                          |                       |                       |                 |
| shareholders of the Company               | 66,348          | 46,639                   | 32,512                | 46,672                | 51,244          |
| Basic earnings per share <sup>(2)</sup>   | 0.571           | 0.399                    | 0.269                 | 0.385                 | 0.423           |
| Basic earnings per ADS <sup>(2)</sup>     | 57.14           | 39.92                    | 26.90                 | 38.55                 | 42.33           |
| Diluted earnings per share <sup>(2)</sup> | 0.536           | 0.399                    | 0.269                 | 0.385                 | 0.423           |
| Diluted earnings per ADS <sup>(2)</sup>   | 53.59           | 39.89                    | 26.90                 | 38.55                 | 42.33           |
| Cash dividends declared per share         | 0.240           | 0.200                    | 0.150                 | 0.249                 | 0.500           |
| Segment Operating Income/(Loss)           |                 |                          |                       |                       |                 |
| Exploration and production                | 54,793          | 47,057                   | (17,418)              | (36,641)              | (45,944)        |
| Refining                                  | 8,599           | (1,954)                  | 20,959                | 56,265                | 65,007          |
| Marketing and distribution                | 35,143          | 29,449                   | 28,855                | 32,153                | 31,569          |
| Chemicals                                 | 846             | (2,229)                  |                       | 20,623                | 26,977          |
| Corporate and others                      | (3,412)         |                          |                       | 3,212                 | (4,484)         |
| Elimination of inter-segment              | (-, )           | ( ,: : : )               |                       | -,                    | (, - )          |
| sales                                     | 794             | 2,179                    | 4,566                 | 1,581                 | (1,655)         |
| Operating income                          | 96,763          | 73,439                   | 56,822                | 77,193                | 71,470          |
| Shares                                    |                 |                          |                       |                       |                 |
| Basic weighted average number             |                 |                          |                       |                       |                 |
| of A and H shares                         | 116.102.910.373 | 116,822,487,451          | 120.852.547.200       | 121,071,209,646       | 121.071.209.646 |
| Diluted weighted average number           | ., . , ,        | .,. ,,                   | ., ,, ,               | , , ,                 | , , ,           |
| of A and H shares                         | 121,858,818,276 | 117,242,396,710          | 120,852,547,200       | 121,071,209,646       | 121,071,209,646 |
|   |                 |                          |                       |                       |                 |

|   |   | As  | of December 31,  |  |   |
|---|---|---|--|--|---|
|   | 2013  | 2014  | 2015   | 2016   | 2017  |
|   | (RMB in 1   | nillions, except per  | share, per ADS data  | a and number of sha  | res)  |
| Consolidated Balance Sheet Data <sup>(1)</sup> :  | 16006   | 10.506  | 60.022   | 104.460  | 112.210   |
| Cash and cash equivalents   | 16,336  | 10,526  | 68,933   | 124,468  | 113,218   |
| Total current assets  | 374,578   | 361,559   | 333,657  | 412,261  | 529,049   |
| Total non-current assets  | 1,012,703   | 1,094,035   | 1,113,611  | 1,086,348  | 1,066,455   |
| Total assets  | 1,387,281   | 1,455,594   | 1,447,268  | 1,498,609  | 1,595,504   |
| Total current liabilities   | (572,018)   | (604,451)   | (462,832)  | (485,543)  | (579,446)   |
| Short-term debts and loans from Sinopec Group   |   |   |  |  |   |
| Company and its affiliates (including current   |   |   |  |  |   |
| portion of long-term debts)   | (163,870)   | (178,148)   | (115,446)  | (74,819)   | (80,649)  |
| Long-term debts and loans from Sinopec Group  |   |   |  |  |   |
| Company and its affiliates (excluding current   |   |   |  |  |   |
| portion of long-term debts)   | (145,590)   | (150,932)   | (139,746)  | (117,446)  | (99,124)  |
| Total equity attributable to equity shareholders of   |   |   |  |  |   |
| the Company   | (571,087)   | (595,255)   | (676,197)  | (710,994)  | (726, 120)  |
| Total equity  | (625,778)   | (649,603)   | (788,161)  | (831,235)  | (852,890)   |
|   |   |   |  |  |   |
|   |   | **  |  |  |   |
|   | 2012  |   | Ended December 31  |  | 2017  |
|   | 2013 (RMB in 1  | 2014  | 2015   | 2016   | 2017  |
| Statement of Cash Flow and Other Financial  |   | 2014  |  | 2016   |   |
| Statement of Cash Flow and Other Financial Data <sup>(1)</sup> :  |   | 2014  | 2015   | 2016   |   |
| Data <sup>(1)</sup> :   | (RMB in 1   | 2014<br>nillions, except per  | 2015<br>share, per ADS data  | 2016<br>a and number of sha  | nres)   |
| <b>Data</b> <sup>(1)</sup> : Net cash generated from operating activities   |   | 2014  | 2015   | 2016   |   |
| Data <sup>(1)</sup> :   | (RMB in 1   | 2014<br>millions, except per  | 2015<br>share, per ADS data<br>165,740   | 2016   | 190,935   |
| Data <sup>(1)</sup> : Net cash generated from operating activities Net cash generated from/(used in) financing activities   | (RMB in 1) 151,470 31,146   | 2014<br>millions, except per<br>148,019<br>(21,524)                                       | 2015<br>share, per ADS data<br>165,740<br>9,093  | 2016   | 190,935<br>(56,509)   |
| Data <sup>(1)</sup> : Net cash generated from operating activities Net cash generated from/(used in) financing activities Net cash used in investing activities   | (RMB in 1   | 2014<br>millions, except per  | 2015<br>share, per ADS data<br>165,740   | 2016   | 190,935   |
| Data <sup>(1)</sup> : Net cash generated from operating activities Net cash generated from/(used in) financing activities Net cash used in investing activities Capital expenditure Exploration and   | (RMB in 1<br>151,470<br>31,146<br>(178,322)   | 2014<br>nillions, except per  148,019  (21,524) (132,321)                                 | 2015<br>share, per ADS data<br>165,740<br>9,093<br>(116,719)   | 2016 a and number of sha  214,543  (93,047) (66,217)                                   | 190,935<br>(56,509)<br>(145,323)  |
| Data <sup>(1)</sup> :  Net cash generated from operating activities  Net cash generated from/(used in) financing     activities  Net cash used in investing activities  Capital expenditure Exploration and     production  | (RMB in 1<br>151,470<br>31,146<br>(178,322)<br>105,311  | 2014<br>millions, except per  148,019  (21,524) (132,321)  80,196                         | 2015<br>share, per ADS data<br>165,740<br>9,093<br>(116,719)<br>54,710                               | 2016 a and number of sha  214,543  (93,047) (66,217)  32,187                           | 190,935<br>(56,509)<br>(145,323)<br>31,344  |
| Data <sup>(1)</sup> :  Net cash generated from operating activities  Net cash generated from/(used in) financing     activities  Net cash used in investing activities  Capital expenditure Exploration and     production     Refining   | 151,470<br>31,146<br>(178,322)<br>105,311<br>26,064   | 2014<br>millions, except per  148,019  (21,524) (132,321)  80,196 27,957                  | 2015<br>share, per ADS data<br>165,740<br>9,093<br>(116,719)<br>54,710<br>15,132                     | 2016 a and number of sha  214,543  (93,047) (66,217)  32,187 14,347                    | 190,935<br>(56,509)<br>(145,323)<br>31,344<br>21,075                              |
| Data <sup>(1)</sup> :  Net cash generated from operating activities  Net cash generated from/(used in) financing     activities  Net cash used in investing activities  Capital expenditure Exploration and     production     Refining     Marketing and distribution                    | (RMB in 1<br>151,470<br>31,146<br>(178,322)<br>105,311<br>26,064<br>29,486                    | 2014 millions, except per  148,019  (21,524) (132,321)  80,196 27,957 26,989              | 2015<br>share, per ADS data<br>165,740<br>9,093<br>(116,719)<br>54,710<br>15,132<br>22,115           | 2016 a and number of sha  214,543  (93,047) (66,217)  32,187 14,347 18,493             | 190,935<br>(56,509)<br>(145,323)<br>31,344<br>21,075<br>21,539                    |
| Data <sup>(1)</sup> :  Net cash generated from operating activities  Net cash generated from/(used in) financing activities  Net cash used in investing activities  Capital expenditure Exploration and production  Refining  Marketing and distribution  Chemicals                       | (RMB in 1<br>151,470<br>31,146<br>(178,322)<br>105,311<br>26,064<br>29,486<br>19,263          | 2014 millions, except per  148,019  (21,524) (132,321)  80,196 27,957 26,989 15,944       | 2015<br>share, per ADS data<br>165,740<br>9,093<br>(116,719)<br>54,710<br>15,132<br>22,115<br>17,634 | 2016 a and number of sha  214,543  (93,047) (66,217)  32,187 14,347 18,493 8,849       | 190,935<br>(56,509)<br>(145,323)<br>31,344<br>21,075<br>21,539<br>23,028          |
| Data <sup>(1)</sup> :  Net cash generated from operating activities  Net cash generated from/(used in) financing activities  Net cash used in investing activities  Capital expenditure Exploration and production  Refining  Marketing and distribution  Chemicals  Corporate and others | (RMB in 1<br>151,470<br>31,146<br>(178,322)<br>105,311<br>26,064<br>29,486<br>19,263<br>5,076 | 2014 millions, except per  148,019  (21,524) (132,321)  80,196 27,957 26,989 15,944 3,648 | 2015 share, per ADS data  165,740  9,093 (116,719)  54,710 15,132 22,115 17,634 2,821                | 2016 a and number of sha  214,543  (93,047) (66,217)  32,187 14,347 18,493 8,849 2,580 | 190,935<br>(56,509)<br>(145,323)<br>31,344<br>21,075<br>21,539<br>23,028<br>2,398 |
| Data <sup>(1)</sup> :  Net cash generated from operating activities  Net cash generated from/(used in) financing activities  Net cash used in investing activities  Capital expenditure Exploration and production  Refining  Marketing and distribution  Chemicals                       | (RMB in 1<br>151,470<br>31,146<br>(178,322)<br>105,311<br>26,064<br>29,486<br>19,263          | 2014 millions, except per  148,019  (21,524) (132,321)  80,196 27,957 26,989 15,944       | 2015<br>share, per ADS data<br>165,740<br>9,093<br>(116,719)<br>54,710<br>15,132<br>22,115<br>17,634 | 2016 a and number of sha  214,543  (93,047) (66,217)  32,187 14,347 18,493 8,849       | 190,935<br>(56,509)<br>(145,323)<br>31,344<br>21,075<br>21,539<br>23,028          |
| Data <sup>(1)</sup> :  Net cash generated from operating activities  Net cash generated from/(used in) financing activities  Net cash used in investing activities  Capital expenditure Exploration and production  Refining  Marketing and distribution  Chemicals  Corporate and others | (RMB in 1<br>151,470<br>31,146<br>(178,322)<br>105,311<br>26,064<br>29,486<br>19,263<br>5,076 | 2014 millions, except per  148,019  (21,524) (132,321)  80,196 27,957 26,989 15,944 3,648 | 2015 share, per ADS data  165,740  9,093 (116,719)  54,710 15,132 22,115 17,634 2,821                | 2016 a and number of sha  214,543  (93,047) (66,217)  32,187 14,347 18,493 8,849 2,580 | 190,935<br>(56,509)<br>(145,323)<br>31,344<br>21,075<br>21,539<br>23,028<br>2,398 |

- (1) The acquisition of 55% equity interest of Shanghai Gaoqiao Petrochemical Co., Ltd. ("Gaoqiao") in 2016 from Sinopec Group Company were considered as "combination of entities under common control" and accounted in a manner of predecessor value accounting. Accordingly, the acquired assets and liabilities have been accounted for at historical cost and the consolidated financial statements for periods prior to the combinations have been restated to include the financial condition and results of operation of these acquired business on a combined basis.
- (2) Basic earnings per share have been computed by dividing net income attributable to equity shareholders of our company by the weighted average number of shares in issue. Basic and diluted earnings per ADS have been computed as if all of our issued and authorized ordinary shares, including domestic shares and H shares, are represented by ADSs during each of the years presented. Each ADS represents 100 shares.
- (3) On October 26, 2017, Gaoqiao purchased 50% equity interest in Shanghai SECCO from BP Chemicals East China Investment Limited with a cash consideration of RMB 10,135 million. Before the acquisition, we and one of our subsidiaries held 30% and 20% equity interest in Shanghai SECCO, respectively. Upon completion of the acquisition, we, together with our subsidiaries, hold 100% equity interest of Shanghai SECCO, which became a subsidiary of us.

#### B. CAPITALIZATION AND INDEBTEDNESS

Not applicable.

#### C. REASONS FOR THE OFFER AND USE OF PROCEEDS

Not applicable.

#### D. RISK FACTORS

### **Risks Relating to Our Business Operation**

# We are exposed to risks associated with price fluctuations of crude oil and refined oil products and petrochemical products.

We consume a large amount of crude oil to produce our refined oil products and petrochemical products. Increases in crude oil prices may result in cost inflation, and high prices may also reduce demand for our products which might adversely affect our profitability. Decreases in prices of crude oil, refined oil products and petrochemical products may cause us to incur impairment to our investment and assets. A prolonged period of low oil prices may impact our profit and ability to maintain our long-term investment projects. In addition, while we try to adjust the sale prices of our products to reflect international crude oil price fluctuations, our ability to pass on the increased cost resulting from crude oil price increases to our customers may be limited, and is dependent on international and domestic market conditions as well as the PRC government's price control policies over refined oil products. For instance, the PRC government could exercise price control over refined oil products when international crude oil prices experience a sustained rise or become significantly volatile. As a result, our results of operations and financial condition may be materially affected by the fluctuation of prices of crude oil, refined oil products and petrochemical products.

#### Our continued business success depends in part on our ability to replace reserves and develop newly discovered reserves.

Our ability to achieve our growth objectives is dependent in part on our level of success in discovering or acquiring additional oil and natural gas reserves. Our exploration and development activities for additional reserves also expose us to inherent risks associated with drilling, including the risk that no proved oil or natural gas reservoirs might be discovered. Exploring for, developing and acquiring reserves is highly risky and capital intensive. The fluctuation in the prices of crude oil and natural gas will impact the amount of our proved oil or natural gas reserves. In the low oil price environment, only large scale, high quality reserves meet our development criteria. Some exploration projects are not viable at the current crude oil price level and cannot be carried forward, potentially leading to failure in supplementing our oil and natural gas reserves with additional reserves through future exploration. Without reserve additions through further exploration and development or acquisition activities, or if the prices of crude oil and natural gas fall sharply, our reserves and production will decline over time, which may materially and adversely affect our results of operations and financial condition.

We rely heavily on outside suppliers for crude oil and other raw materials, and we may even experience disruption of our ability to obtain crude oil and other raw materials.

We purchase a significant portion of crude oil and other feedstock from outside suppliers located in different countries and regions in the world, of which an insignificant amount of the crude oil processed by our refinery business was sourced from countries or regions that are on the sanction list published and administered by the Office of Foreign Assets Control, or OFAC, of the US Department of Treasury, including Iran and Sudan. In addition, our business growth requires us to source an increasing amount of crude oil from outside suppliers. While we purposely source our crude oil from a diversified portfolio of outside suppliers to avoid any potential disruptions to our normal business operations, we are subject to the political, geographical and economic risks associated with these countries and areas. If our contractual relationships with one or more outside suppliers were terminated or disrupted due to any natural disasters or political events, it is possible that we would not be able to find sufficient alternative sources of supply in a timely manner or on commercially reasonable terms. As a result, our business and financial condition would be materially and adversely affected.

Our business faces operation risks and natural disasters that may cause significant property damages, personal injuries and interruption of operations, and we may not have sufficient insurance coverage for all the financial losses incurred by us.

Exploring for, producing and transporting crude oil and natural gas and producing and transporting refined oil products and petrochemical products involves a number of operating hazards. Our operations are subject to significant hazards and risks inherent in refining operations and in transporting and storing crude oil, intermediate products, refined oil products and chemical products. These hazards and risks include, but are not limited to, natural disasters, fires, explosions, pipeline ruptures and spills, third-party interference and mechanical failure of equipment at our or third-party facilities, any of which could result in production and distribution difficulties and disruptions, environmental pollution, personal injury or wrongful death claims and other damage to our properties and the property of others. There is also risk of mechanical failure and equipment shutdowns both in general and following unforeseen events. In certain situations, undamaged refinery processing units may be dependent on or interact with damaged process units and, accordingly, are also subject to being shut down. Even though we have a strong institutional focus on the safety of our operations and have implemented health, safety and environment (HSE) management system within our company with the view to preventing accidents, and reducing personal injuries, property losses and environment pollution, our preventative measures may not be effective. We also maintain insurance coverage on our property, plant, equipment, inventory and potential third party liability, but our insurance coverage may not be sufficient to cover all the financial losses caused by the operation risks and natural disasters. Significant operating hazards and natural disasters may cause interruption to our operations, property or environmental damages as well as personal injuries, and each of these incidents could have a material adverse effect on our financial condition and results of operations.

The oil and natural gas reserves data in this annual report are only estimates, and our actual production, revenues and expenditures with respect to our reserves may differ materially from these estimates.

There are numerous uncertainties inherent in estimating quantities of proved oil and natural gas reserves, and in the timing of development expenditures and the projection of future rates of production. Adverse changes in economic conditions, such as a prolonged period of low oil prices, may render it uneconomical to develop certain reserves and lead to downward revisions in our reserves. Our actual production, revenues, taxes and fees payable and development and operating expenditures with respect to our reserves may likely vary from these estimates.

The estimate of reserves is influenced by, among other things:

- the quality and quantity of technical and economic data;
- the prevailing oil and gas prices applicable to our production;
- the production performance of the reservoirs; and
- the production plans and etc.

In addition, new drilling, testing and production results following the estimates may cause substantial upward or downward revisions in the estimates.

Oilfield exploration and drilling involves numerous risks, including risks that no commercially productive crude oil or natural gas reserves can be discovered and risks of failure to acquire or retain reserves.

Our oil and gas business is currently involved in exploration activities in various regions, including in some areas where natural conditions may be challenging and where the costs of such exploration activities may be high. As a result, our oil and gas business may incur cost overruns or may be required to curtail, delay or cancel drilling operations because of many factors, including, but not limited to, the following:

- unexpected conditions in drilling projects;
- irregularities in geological formations pressure;
- equipment failures;
- oil well blowouts;
- adverse weather conditions or natural disasters;
- compliance with existing or enhanced environmental regulations;
- governmental requirements and standards; or
- delays in the availability of drilling rigs and delivery and maintenance of equipment.

The future production of our oil and gas business depends significantly upon our success in finding or acquiring additional reserves and retaining and developing such reserves. If our oil and gas business fails to conduct successful exploration activities or to acquire or retain assets holding proved reserves, it may not meet its production or growth targets, and its proved reserves will decline as it extracts crude oil and natural gas from the existing reservoirs, which could adversely affect our business, financial condition and results of operations.

We have been actively pursuing business opportunities outside China to supplement our domestic resources. However, there can be no assurance that we can successfully locate sufficient alternative sources of crude oil supply or at all due to the complexity of the international political, economic and other conditions. If we fail to obtain sufficient alternative sources of crude oil supply, our results of operations and financial condition may be adversely affected.

Our exploration, development and production activities and our refining and petrochemical business require substantial expenditure and investments and our plans for and ability to make such expenditures and investments are subject to various risks.

Exploring, developing and producing crude oil and natural gas fields are capital-intensive activities involving a high degree of risk. Our ability to undertake exploration, development and production activities and make the necessary capital expenditures and investments is subject to many risks, contingencies and other uncertainties, which may prevent our oil and gas business from achieving the desired results, or which may significantly increase the expenditures and investments that our oil and gas business makes, including, but not limited to, the following:

- ability to generate sufficient cash flows from operations to finance its expenditures, investments and other requirements, which are affected by changes in crude oil and natural gas prices and sales volumes, and other factors;
- availability and terms of external financing;

- mix of exploration and development activities conducted on an independent basis and those conducted jointly with other partners;
- extent to which its ability to influence or adjust plans for exploration and development related expenditures is limited under joint operating agreements for those projects in which it has partners;
- government approvals required for exploration and development-related expenditures and investments in jurisdictions in which it conducts business; and
- economic, political and other conditions in jurisdictions in which it conducts business.

From time to time, we may construct new and/or revamp existing refining and petrochemical facilities, which require substantial capital expenditures and investments. There can be no assurance that the cash generated by our operations will be sufficient to fund these development plans or that our actual future capital expenditures and investments will not significantly exceed our current planned amounts. Our inability to obtain sufficient funding for development plans could adversely affect our business, financial condition and results of operations.

# Our development projects and production activities involve many uncertainties and operating risks that can prevent us from realizing profits and cause substantial losses.

Our development projects and production activities may be curtailed, delayed or cancelled for many reasons, including equipment shortages or failures, natural hazards, unexpected drilling conditions or reservoir characteristics, pressure or irregularities in geological formations, accidents, mechanical and technical difficulties and industrial action. These projects and activities, which include projects focused on non-conventional oil and gas exploration and development, will also often require the use of new and advanced technologies that may be expensive to develop, purchase and implement, and may not function as expected. There is a risk that any development projects that we undertake may not yield adequate returns. In addition, our development projects and production activities, particularly those in remote areas, could become less profitable, or unprofitable, if we experience a prolonged period of low oil or gas prices or cost overruns.

#### Our business may be adversely affected by actions and regulations prompted by global climate changes.

As many nations in the world have reached consensus on the importance and urgency of addressing climate change, the oil and gas industry in which we operate is drawing increasing concerns about global climate change in recent years. A number of international, national and regional measures to limit greenhouse gas emissions have been enacted. The Paris Agreement on climate change adopted by 195 nations in December 2015 has placed binding commitments on nations that have ratified it since November 2016, which may lead to more stringent national and regional measures in the near future. It could result in our substantial capital expenditure from compliance with these measures, and our revenue generation and strategic growth opportunities could also be adversely impacted. In addition, China has undertaken to peak the CO2 emissions by 2030 or earlier, if possible, and to increase the non-fossil fuel share of all energy to around 20 percent by 2030. China has also implemented a national carbon emissions trading scheme in 2017, power generation industry has been included initially, and will gradually expand the industry coverage after the market matures. We are recognized as an emission-control enterprise as are most of the Chinese enterprises, which could have adverse effect on our business, financial condition and results of operations.

# Our overseas businesses may be adversely affected by changes of overseas government policies and business environment.

We have operations and assets and may seek new opportunities in various countries and regions, including countries in Africa, South America and Central Asia and certain other regions, some of which are deemed to be subject to a high degree of political risk. These countries have experienced and/or may experience in future political instability, changes to the regulatory environment, changes in taxation and foreign exchange controls, disease outbreaks, deterioration in social security and environmental risks. Any of these conditions occurring could disrupt or curtail our operations or development activities. These events may also cause our production to decline, limit our ability to pursue new opportunities, affect the recoverability of our assets or cause us to incur additional costs, particularly due to the long-term nature of many of our projects and the significant capital expenditure required.

We may be classified as a passive foreign investment company for United States federal income tax purposes, which could result in adverse United States federal income tax consequences to United States investors in the H shares or ADSs.

Depending upon the value of our assets, which may be determined based, in part, on the market price of our H shares or ADSs, and the nature of our assets and income over time, we could be classified as a passive foreign investment company, or PFIC, for United States federal income tax purposes. Based on our income and assets and the market price of our H shares or ADSs, we do not believe that we were a PFIC for the taxable year ended December 31, 2017 and do not anticipate becoming a PFIC or in the foreseeable future. Because PFIC status is a factual determination made annually after the close of each taxable year on the basis of the composition of our income and the value of our active versus passive assets for that year, there can be no assurance that we will not be a PFIC for any future taxable year. The overall level of our passive assets will be affected by how, and how quickly, we expend our liquid assets. Under circumstances where gross income from activities that produce passive income significantly increase relative to our gross income from activities that produce non-passive income or where we determine not to deploy significant amounts of cash for active purposes, our risk of becoming classified as a PFIC may substantially increase. If we were to be or become classified as a PFIC, a US Holder (as defined in "Item 10. Additional Information — E. Taxation — United States Federal Income Tax

Considerations") may incur significantly increased United States income tax on gain recognized on the sale or other disposition of the H shares or ADSs and on the receipt of distributions on the H shares or ADSs to the extent such gain or distribution is treated as an "excess distribution" under the United States federal income tax rules. For more information see "Item 10. Additional Information — E. Taxation— United States Federal Income Tax Considerations."

#### Our operations may be adversely affected by cyber-attacks or similar disruptions.

We devote significant resources to protecting our digital infrastructure and data against cyber-attacks, if our systems against cyber-security risk prove to be ineffective, we could be adversely affected by, among other things, disruptions to our business operations, and loss of proprietary information, including intellectual property, financial information and employer and customer data, injury to people, property, environment and reputation. As cyber-security attacks continue to evolve, we may be required to expend additional resources to enhance our protective measures against cyber-security breaches.

#### **Risks Relating to Our Industry**

#### Our operations may be adversely affected by the global and domestic economic conditions.

Our results of operations are materially affected by economic conditions in China and elsewhere around the world. There are some uncertainty and instability in the current global economic recovery. The Chinese economy has entered the "new normal" stage with stable and favorable economic growth and is moving forward with high quality development. Our operations may also be adversely affected by factors such as foreign countries' trade protection policies and regional trade agreements which may adversely affect our export and import activities.

# Our operations may be adversely affected by the cyclical nature of the market.

Most of our revenues are attributable to sales of refined oil products and petrochemical products, and certain of these businesses and related products have historically been cyclical and sensitive to a number of factors that are beyond our control. These factors include the availability and prices of feedstock and general economic conditions, such as changes in industry capacity and output levels, cyclical changes in regional and global economic conditions, prices and availability of substitute products and fluctuation in prices and demands of natural gas, refined oil products and chemical products. Although we are an integrated company with upstream, midstream and downstream businesses, we have limited ability to mitigate the adverse influence of the cyclicality of global markets.

#### We face strong competition from domestic and foreign competitors.

Among our competitors, some are major integrated petroleum and petrochemical companies within and outside China, which have recently become more significant participants in the petroleum and petrochemical industry in China. The PRC government has gradually eased the restrictions on the right to use imported crude oil and relaxed control over the right to import refined oil products. This development may lead to refining overcapacity in China and intensify competition among local refineries. The relaxation of import control may drive up cost of crude oil imports and reduce the prices of refined oil products, thus adversely impact our refining margin. The Chinese crude oil and refined oil product markets are becoming increasingly dynamic and internationalized with implementation of tariff concessions and relaxation of market access as part of China's commitment for its accession to the WTO. The potential trade conflict and increased trade protection measures implemented by several countries may adversely affect the production, trade or demand in petroleum and petrochemical industries, and may have a significant impact on our results of operations. In the wholesale market of refined oil products previously dominated by PetroChina and us, we are facing stronger competition with new players and imported products entering the market. Our market share of chemical products is also under stronger competitive pressure due to the increasingly active participation of diversified new market players including multinational petroleum and petrochemical companies and domestic private enterprises. In addition, we also expect to face competition in both domestic and international petrochemical product market as a result of our domestic and international competitors' increasing production capacity. Increased competition may have a material adverse effect on our financial condition and results of operations.

#### Risks Relating to Our Controlling Shareholder

#### We engage in related party transactions with Sinopec Group from time to time which may create potential conflict of interest.

We have engaged from time to time and will continue to engage in a variety of transactions with Sinopec Group, which provides us with a number of services, including, but not limited to, ancillary supply, engineering, maintenance, transport, lease of land use right, lease of buildings, as well as educational and community services. The nature of our transactions with Sinopec Group is governed by a number of service and other contracts between Sinopec Group and us. We have established various schemes in those agreements so that these transactions, when entered into, are under terms that are at arm's length. However, we cannot assure you that Sinopec Group Company or any of its members would not take actions that may favor its interests or its other subsidiaries' interests over ours.

We are controlled by Sinopec Group Company, our ultimate controlling shareholder, whose interest in certain businesses compete or are likely to compete with our business.

Sinopec Group Company has interests in certain businesses, such as oil refining, petrochemical producing and overseas exploration and development, which compete or are likely to compete, either directly or indirectly, with our businesses. To avoid the adverse effects brought by the competition between us and Sinopec Group Company to the maximum extent possible, we and Sinopec Group Company have entered into a non-competition agreement. In 2012, we received from Sinopec Group Company an undertaking to avoid its competition with us. For details, please refer to the descriptions under "Item 7. Major Shareholders and Related Party Transactions — A. Major Shareholders". Notwithstanding the foregoing contractual arrangements, because Sinopec Group Company is our controlling shareholder, Sinopec Group Company may take actions that may conflict with our own interests.

It is possible that the current or future activities of our ultimate controlling shareholder, Sinopec Group Company, or its affiliates in or with certain countries that are the subject of economic sanctions under relevant U.S. laws could result in negative media and investor attention to us and possible imposition of sanctions on Sinopec Group Company, which could materially and adversely affect our shareholders' value and operations.

Sinopec Group Company undertakes, from time to time and without our involvement, overseas investments and operations in the oil and gas industry, including exploration and production of oil and gas, refining and Liquefied Natural Gas or LNG, oilfield services and refining engineering projects. Sinopec Group Company's overseas asset portfolio includes a limited number of projects in countries that are subject to U.S. sanctions administrated by OFAC and by the U.S. Department of State. We currently do not believe that our investments will result in any direct sanctions imposed by OFAC. However, further trade restrictions and other sanctions could adversely impact our investments. In addition, the United States may expand its sanctions regime to include other countries or regions where Sinopec Group Company or its affiliates, including us, may have assets or operations, or may unilaterally reinstate its sanction regime in Iran, where most U.S. secondary sanctions (i.e., those covering non-U.S. persons) have been suspended since January 16, 2016 pursuant to the terms of the Joint Comprehensive Plan of Action (the JCPOA), in the event of a dispute over Iran's compliance with its nuclear commitments under the JCPOA. We cannot predict the interpretation or implementation of government policy at the U.S. federal, state or local levels with respect to any current or future activities by Sinopec Group Company or its affiliates, including us, in countries or with individuals or entities that are the subject of U.S. sanctions. Similarly, we cannot predict whether U.S. sanctions will be further tightened or reinstated in the case of Iran, or the impact that such actions may have on Sinopec Group Company and us. Certain U.S. state and local governments and colleges have restrictions on the investment of public funds or endowment funds, respectively, in companies that are members of corporate groups with activities in certain countries that are the subject of U.S. sanctions. These investors may not wish to invest, and may divest their investment, in us because of our relationship with Sinopec Group Company and its investments and activities in those OFAC sanctioned countries. It is possible that, as a result of activities by Sinopec Group Company or its affiliates in countries that are the subject of U.S. sanctions, we may be subject to negative media or investor attention, which may distract management, consume internal resources and affect investors' perception of our company. Furthermore, if the most extreme sanction measures under U.S. sanctions laws were applied to the properties of Sinopec Group Company and its controlled subsidiaries, Sinopec Group Company could be prohibited from engaging in business activities in the United States or with U.S. individuals or entities, and U.S. transactions in our securities and distributions to U.S. individuals and entities with respect to our securities could also be prohibited.

#### Risks Relating to the PRC

#### Government regulations may limit our activities and affect our business operations.

The PRC government, though gradually liberalizing its regulations on entry into the petroleum and petrochemical industry, continues to exercise certain controls over the petroleum and petrochemical industry in China. These control mechanisms include granting the licenses to explore and produce crude oil and natural gas, granting the licenses to market and distribute crude oil and refined oil products, regulating the upper limit of the retail prices for gasoline and diesel; collecting special oil income levies, deciding import and export quotas and procedures, setting safety, environmental and quality standards, and formulating policies to save energy and reduce emission; meanwhile, there could be potential changes to macroeconomic and industry policies such as reforming of the oil and gas industry, further improvement of pricing mechanism of refined oil products, reforming and improvement of pricing mechanism of natural gas, and reforming in resource tax and environmental tax, which could impact our production and operations. Such control mechanisms may have material effects on our operations and profitability.

The PRC governmental authorities, from time to time, audit or inspect our ultimate controlling shareholder. We cannot predict the impact if any, of their outcome on our reputation, business and financial condition as well as the trading prices of our ADSs and H shares.

The PRC governmental authorities, from time to time, perform audits, inspections, inquiries or similar actions on state-owned companies, such as Sinopec Group Company, our ultimate controlling shareholder. Such inspections are not conducted on a regular basis with specific targets, and therefore we cannot predict the outcome of these governmental activities. If, as a result of such audits, inspections or inquiries, (i) material irregularities are found within Sinopec Group Company or us or our employees or (ii) Sinopec Group Company or we become the target of any negative publicity, our reputation, business and financial condition as well as the trading prices of our ADSs and H shares may be materially and negatively impacted.

# Our business operations may be adversely affected by present or future environmental regulations.

As an integrated petroleum and petrochemical company, we are subject to extensive environmental protection laws and regulations in China. These laws and regulations permit:

- the imposition of environmental tax for the discharge of waste substances;
- the government, in accordance with law, to order correction, suspend production and impose fines for unlicensed or uncertified pollution discharge;

- the government, at its discretion, to seal up or close down any facility which has cause or may cause severe environmental damage and require it to correct or stop operations causing environmental damage; and
- litigations and liabilities arising from pollutions and damages to the environment and public interests.

Our production activities produce substantial amounts of liquid, gas and solid waste materials. We have established a system to treat waste materials to prevent and reduce pollution. However, the PRC government has moved, and may move further, toward more rigorous enforcement of applicable laws, and toward the adoption of more stringent environmental standards, which, in turn, would require us to incur additional expenditures on environmental matters.

In recent years, we have commenced exploration and production of unconventional oil and gas resources, such as shale oil and gas and coal bed methane, through the application of relatively advanced technologies. As a result, our unconventional oil and gas operations are subject to the limitations of unproven technology and expose us to higher environmental compliance standards and requirements. In the event of any failure to comply with such standards and requirements, we may be subject to public concerns about our unconventional oil and gas operations, which may also harm our corporate reputation.

#### Some of our development plans require compliance with state policies and governmental regulation.

We are currently engaged in a number of construction, renovation and expansion projects. Some of our large construction, renovation and expansion projects are subject to governmental confirmation and registration. The timing and cost of completion of these projects will depend on numerous factors, including when we can receive the required confirmation and registration from relevant PRC government authorities and the general economic condition in China. If any of our key projects required for our future growth are not confirmed or registered, or not confirmed or registered in a timely manner, our results of operations and financial condition could be adversely impacted.

Government control of currency conversion and exchange rate fluctuation may adversely affect our operations and financial results.

We receive a significant majority of our revenues in Renminbi. A portion of such revenues will need to be converted into other currencies to meet our foreign currency needs, which include, among other things:

- import of crude oil and other materials;
- debt service on foreign currency-denominated debt;
- purchases of imported equipment;
- payment of the principals and interests of bonds issued overseas; and
- payment of any cash dividends declared in respect of the H shares (including ADS).

The existing foreign exchange regulations have significantly reduced government foreign exchange controls for transactions under the current account, including trade and service related foreign exchange transactions and payment of dividends. Foreign exchange transactions under the capital account, including principal payments in respect of foreign currency-denominated obligations, continue to be subject to significant foreign exchange controls and require the approval of the State Administration of Foreign Exchange. These limitations could affect our ability to obtain foreign exchange through debt or equity financing, or to obtain foreign exchange. The PRC government has stated publicly that it intends to make the Renminbi freely convertible in the future. However, we cannot predict whether the PRC government will continue its existing foreign exchange policy and when the PRC government will allow free conversion of Renminbi.

The exchange rate of the Renminbi against the U.S. dollar and other foreign currencies fluctuates and is affected by, among other things, the changes in the PRC's and international political and economic conditions. On July 21, 2005, the PRC government introduced a floating exchange rate system to allow the value of the Renminbi to fluctuate within a regulated band based on market supply and demand and by reference to a basket of foreign currencies. On June 19, 2010 and August 11, 2015, respectively, the People's Bank of China (PBOC) decided to further promote the reform of exchange rate regime and enhance the flexibility of Renminbi exchange rate. Prices of refined oil products are guided by the PRC Government and are pegged to the exchange rate of the Renminbi against the U.S. dollar. Therefore the impact of Renminbi exchange rate fluctuation on the purchase cost of crude oil could largely be offset by the corresponding fluctuation in the prices of domestic refined oil products and chemical products.

#### Risks relating to enforcement of shareholder rights; Mandatory arbitration.

Currently, the primary sources of shareholder rights are our articles of association, the PRC Company Law and the Listing Rules of the Hong Kong Stock Exchange, which, among other things, impose certain standards of conduct, fairness and disclosure on us, our directors and our controlling shareholder. In general, their provisions for protection of shareholder's rights and access to information are different from those applicable to companies incorporated in the United States, the United Kingdom and other Western countries. In addition, the mechanism for enforcement of rights under the corporate framework to which we are subject may also be relatively undeveloped and untested. To our knowledge, there has not been any published report of judicial enforcement in the PRC by H share shareholders of their rights under constituent documents of joint stock limited companies or the PRC Company Law or in the application or interpretation of the PRC or Hong Kong regulatory provisions applicable to PRC joint stock limited companies. We cannot guarantee that our shareholders will enjoy protections that they may be entitled in other jurisdictions.

China does not have treaties providing for the reciprocal recognition and enforcement of judgments of courts with the United States, the United Kingdom or most other Western countries, and therefore recognition and enforcement in China of judgments of a court in any of these jurisdictions in relation to any matter not subject to a binding arbitration provision may not be assured. Our articles of association as well as the Listing Rules of the Hong Kong Stock Exchange provide that most disputes between holders of H shares and us, our directors, supervisors, officers or holders of domestic shares, arising out of the articles of association or the PRC Company Law concerning the affairs of our company, are to be resolved through arbitration, at the election of the claimant, by arbitration organizations in Hong Kong or the PRC, rather than through a court of law. On June 18, 1999, an arrangement was made between Hong Kong and the PRC for the mutual enforcement of arbitral awards. This new arrangement was approved by the Supreme People's Court of the PRC and the Hong Kong Legislative Council, and became effective on February 1, 2000. We are uncertain as to the outcome of any action brought in China to enforce an arbitral award granted to shareholders.

Our auditor, like other independent registered public accounting firms operating in China, is not permitted to be subject to inspection by Public Company Accounting Oversight Board, and as such, investors may be deprived of the benefits of such inspection.

Our independent registered public accounting firm that issues the audit reports included in our annual reports filed with the SEC, as an auditor of companies that are traded publicly in the United States and a firm registered with the Public Company Accounting Oversight Board, or PCAOB, is required by the laws of the United States to undergo regular inspections by PCAOB to assess its compliance with the laws of the United States and professional standards. Because our auditor is located in China, a jurisdiction where PCAOB is currently unable to conduct inspections without the approval of the PRC authorities, our auditor, like other independent registered public accounting firms, is currently not inspected by PCAOB.

Inspections of other firms that PCAOB has conducted outside of China have identified deficiencies in those firms' audit procedures and quality control procedures, which may be addressed as part of the inspection process to improve future audit quality. The lack of PCAOB inspections in China may prevent PCAOB from regularly evaluating our auditor's audits and quality control procedures. The inability of PCAOB to conduct inspections of auditors in China makes it more difficult to evaluate the effectiveness of our auditor's audit procedures or quality control procedures. As a result, investors may be deprived of the benefits of PCAOB inspections.

Additional remedial measures imposed on certain PRC-based accounting firms, including our independent registered public accounting firm, in proceedings brought by the SEC alleging the firms' failure to meet specific criteria, could result in financial statements being determined to not be in compliance with the requirements of the Exchange Act.

In December 2012, the SEC brought administrative proceedings against the "Big Four" accounting firms in China, including our independent registered public accounting firm, alleging that these firms had refused to produce audit work papers and other documents related to certain other China-based companies whose securities are publicly traded in the United States. On January 22, 2014, an initial administrative law decision was issued, censuring these accounting firms and barring these firms from practicing before the SEC for a period of six months. The decision is neither final nor legally effective unless and until it is endorsed by the SEC. In February 2015, each of the four PRC-based accounting firms agreed to a censure and to pay a fine to the SEC to settle the dispute and avoid suspension of their ability to practice before the SEC. The settlement requires the firms to follow detailed procedures to seek to provide the SEC with access to Chinese firms' audit documents via the China Securities Regulatory Commission (CSRC) in response to future document requests by the SEC made through the CSRC. If the firms fail to comply with the documentation production procedures that set forth in the settlement agreement or if these required information fails to be provided to the SEC by the CSRC for reasons out of these firms' control, the SEC could impose penalties such as suspensions, or it could restart the administrative proceedings.

In the event that the SEC restarts the administrative proceedings, depending upon the final outcome, listed companies in the United States with major PRC operations may find it difficult or impossible to retain auditors in respect of their operations in the PRC, which could result in financial statements being determined to not be in compliance with the requirements of the Exchange Act, including possible delisting. Moreover, any negative news about the proceedings against these audit firms may cause investor uncertainty regarding China-based, United States-listed companies and the market price of our ADSs may be adversely affected.

If our independent registered public accounting firm was denied, even temporarily, the ability to practice before the SEC and we were unable to timely find another registered public accounting firm to audit and issue an opinion on our financial statements, our financial statements could be determined not to be in compliance with the requirements of the Exchange Act. Such a determination could ultimately lead to the delay or abandonment of this offering, delisting of our ADSs from the New York Stock Exchange (NYSE) or deregistration from the SEC, or both, which would substantially reduce or effectively terminate the trading of our ADSs in the United States.

#### ITEM 4. INFORMATION ON THE COMPANY

#### A. HISTORY AND DEVELOPMENT OF THE COMPANY

Our legal and commercial name is China Petroleum & Chemical Corporation. Our head office is located at 22 Chaoyangmen North Street, Chaoyang District, Beijing 100728, the People's Republic of China, our telephone number is (8610) 5996-0028 and our fax number is (8610) 5996-0386. We have appointed our representative office in the United States, located at 515 Madison Avenue, Suite 27 West, New York, NY 10022, USA (telephone number: (212) 759-5085; fax number: (212) 759-6882) as our agent for service of processes for actions brought under the U.S. securities laws.

We were established as a joint stock limited company on February 25, 2000 under the Company Law of the PRC with Sinopec Group Company as the sole shareholder at our inception. Our principal businesses consist of petroleum and petrochemical businesses transferred to us by Sinopec Group Company pursuant to a reorganization agreement. Such businesses include:

- exploration for, development, production and marketing of crude oil and natural gas;
- refining of crude oil and marketing and distribution of refined oil products, including transportation, storage, trading, import and export of petroleum products; and
- production and sales of petrochemical products.

Sinopec Group's continuing activities primarily consist, among other things, of:

- exploring and developing oil and gas reserves overseas;
- operating certain petrochemical facilities;
- providing geophysical exploration, and well drilling, survey, logging and downhole operational services;
- manufacturing production equipment and providing equipment maintenance services;
- providing construction services;
- providing utilities, such as electricity and water; and
- providing other operational services including transportation services.

Sinopec Group Company transferred the businesses to us either by transferring its equity holdings in subsidiaries or by transferring their assets and liabilities. Sinopec Group Company also agreed in the reorganization agreement to transfer to us its exploration and production licenses and all rights and obligations under the agreements in connection with its core businesses transferred to us. The employees relating to these assets were also transferred to us.

From July 8, 2015 to July 7, 2016, Sinopec Group Company increased its shareholding in the Company through acquisitions of our ordinary shares on the stock market in its own name or through other concerting parties, by way of acquiring 72,000,000 A shares, representing approximately 0.06% of our issued and outstanding shares. Immediately following the shareholding increase, Sinopec Group Company directly and indirectly held 86,345,821,101 shares of the Company, representing approximately 71.32% of our issued and outstanding shares.

On October 29, 2015, we entered into a joint venture agreement with Sinopec Assets Management Co., Ltd. ("SAMC"), a wholly-owned subsidiary of Sinopec Group Company, in relation to the formation of Sinopec Shanghai Gaoqiao Petrochemical Co., Ltd. ("Gaoqiao"). We and SAMC subscribed for 55% and 45% of the registered capital of Gaoqiao, respectively, and Gaoqiao became a subsidiary of the Company.

On August 2, 2016, our board of directors unanimously approved the proposal to introduce capitals from potential investors to invest in Sichuan-to-East China gas pipeline project, through our indirectly wholly-owned subsidiary Sinopec Sichuan-to-East China Natural Gas Pipeline Co., Ltd. ("Sichuan-to-East China Pipeline Co."). On December 12, 2016, China Life Insurance Co., Ltd. ("China Life") and SDIC Communications Holding Co., Ltd. ("SDIC Communications") entered into the Capital Injection Agreement in relation to Sichuan-to-East China Pipeline Co. and agreed to collectively subscribe for 50% equity interest in Sichuan-to-East China Pipeline Co. for an aggregate amount of RMB 22.8 billion in cash. Upon completion of the capital injection, China Life, SDIC Communications and us hold 43.86%, 6.14% and 50% equity interest in Sichuan-to-East China Pipeline Co., respectively.

On April 27, 2017, our board of directors unanimously approved the proposal of the acquisition of equity interest in Shanghai SECCO Petrochemical Company Limited ("Shanghai SECCO") by Gaoqiao. On October 26, 2017, Gaoqiao purchased 50% equity interest in Shanghai SECCO from BP Chemicals East China Investment Limited with a cash consideration of RMB 10,135 million. Before the acquisition, we and one of our subsidiaries held 30% and 20% equity interest in Shanghai SECCO, respectively. Upon completion of the acquisition, we, together with our subsidiaries, hold 100% equity interest of Shanghai SECCO, which became a subsidiary of us.

#### B. BUSINESS OVERVIEW

#### **Exploration and Production**

#### **Overview**

We currently explore for, develop and produce crude oil and natural gas in a number of areas in China and overseas. As of December 31, 2017, we held 217 production licenses in China, with an aggregate acreage of 31,498 square kilometers and with terms ranging from 10 to 80 years. Our production licenses may be renewed upon our application at least 30 days prior to the expiration date, which are renewable for unlimited times. During the term of our production license, we pay an annual production license fee of RMB 1,000 per square kilometer.

As of December 31, 2017, we held 211 exploration licenses in China for various blocks in which we engaged in exploration activities, with an aggregate acreage of approximately 621,500 square kilometers.

As of December 31, 2017, our overseas subsidiary held one production licenses, with an acreage of 322.57 square kilometers. It currently does not have exploration licenses. Our overseas equity-accounted investments held 72 production licenses, with an aggregate acreage of 4,783 square kilometers, and four exploration licenses.

#### **Properties**

We currently operate 295 oil and gas producing fields and blocks.

Shengli production field is our most important crude oil production field. It consists of 75 producing blocks of various sizes extending over an area of 2,559 square kilometers in northern Shandong province, all of which are our net developed acreage. Most of Shengli's blocks are located in the Jiyang trough with various oil producing layers. In 2017, Shengli production field produced 166 million barrels of crude oil and 14.38 billion cubic feet of natural gas, with an average daily production of 426 thousand BOE.

As of December 31, 2017, the total acreage of our oil and gas producing fields and blocks in China was 14,394 square kilometers, including 8,528 square kilometers of developed acreage, all of which were net developed acreage; and 5,866 square kilometers of gross undeveloped acreage, all of which were net undeveloped acreage.

As of December 31, 2017, the total acreage of our oil and gas producing fields and blocks of our overseas subsidiary was 322.57 square kilometers, including 169.21 square kilometers of developed acreage, of which 110 square kilometers were net developed acreage; and 153.36 square kilometers of gross undeveloped acreage, of which 31.8 square kilometers were net undeveloped acreage.

As of December 31, 2017, the total acreage of our oil and gas producing fields and blocks of our overseas equity-accounted investments was 1,700 square kilometers, including 1,628 square kilometers of developed acreage, of which 1,628 square kilometers were net developed acreage; and 72.4 square kilometers of gross undeveloped acreage, of which 72.4 square kilometers were net undeveloped acreage.

# Oil and Natural Gas Reserves

As of December 31, 2017, our estimated proved reserves of crude oil and natural gas in China were 2,425 million BOE (including 1,261 million barrels of crude oil and 6,985 billion cubic feet of natural gas), and our estimated proved reserves of crude oil and natural gas outside of China, which included a share of the estimated proved reserves of our equity-accounted investments, were 340 million BOE. Our estimated proved reserves do not include additional quantities recoverable beyond the term of the relevant production licenses, or that may result from extensions of currently proved areas, or from application of improved recovery processes not yet tested and determined to be economical.

The following tables set forth our proved developed and undeveloped crude oil and natural gas reserves by region as of December 31, 2017.

|   | As of December 31, 2017   |
|---|---|
| Developed Subsidiaries  | (in millions of barrels)  |
| China   | 1,124   |
| Shengli   | 811   |
| Others  | 313   |
| Overseas  | 32  |
| Subtotal  | 1,156   |
| Equity-accounted investments  |   |
| China   | _   |
| Overseas  | 273   |
| Subtotal  | 273   |
| Total Proved Developed  | 1,429   |
| Undeveloped Subsidiaries  |   |
| China   | 137   |
| Shengli   | 49  |
| Others  | 88  |
| Overseas  | <u></u>   |
| Subtotal  | 137   |
| Equity-accounted investments  |   |
| China   | _   |
| Overseas  | 33  |
| Subtotal  | 33  |
| Total Proved Undeveloped  | 170   |
| Total Crude Oil Proved Reserves   | 1,599   |
|   |   |
| Natural Gas Proved Reserves   | As of December 31, 2017   |
| D 1 101'1''   | (in billions of cubic feet)                                     |
|   | (   |
| Developed Subsidiaries  |   |
| China   | 6,000   |
| China<br>Puguang  | 6,000<br>2,127  |
| China Puguang Fuling  | 6,000<br>2,127<br>1,121   |
| China Puguang Fuling Others   | 6,000<br>2,127  |
| China Puguang Fuling Others Overseas  | 6,000<br>2,127<br>1,121<br>2,752                                |
| China Puguang Fuling Others Overseas Subtotal   | 6,000<br>2,127<br>1,121   |
| China Puguang Fuling Others Overseas Subtotal Equity-accounted investments  | 6,000<br>2,127<br>1,121<br>2,752                                |
| China Puguang Fuling Others Overseas Subtotal Equity-accounted investments China  | 6,000<br>2,127<br>1,121<br>2,752<br>—<br>6,000                  |
| China Puguang Fuling Others Overseas Subtotal Equity-accounted investments China Overseas   | 6,000<br>2,127<br>1,121<br>2,752<br>—<br>6,000                  |
| China Puguang Fuling Others Overseas Subtotal Equity-accounted investments China Overseas Subtotal  | 6,000<br>2,127<br>1,121<br>2,752<br>—<br>6,000<br>—<br>12       |
| China Puguang Fuling Others Overseas Subtotal Equity-accounted investments China Overseas Subtotal Total Proved Developed   | 6,000<br>2,127<br>1,121<br>2,752<br>—<br>6,000                  |
| China Puguang Fuling Others Overseas Subtotal Equity-accounted investments China Overseas Subtotal Total Proved Developed Undeveloped Subsidiaries  | 6,000 2,127 1,121 2,752  6,000  12  12  6,012                   |
| China Puguang Fuling Others Overseas Subtotal Equity-accounted investments China Overseas Subtotal Total Proved Developed Undeveloped Subsidiaries China  | 6,000<br>2,127<br>1,121<br>2,752<br>—<br>6,000<br>—<br>12       |
| China Puguang Fuling Others Overseas Subtotal Equity-accounted investments China Overseas Subtotal Total Proved Developed Undeveloped Subsidiaries  | 6,000 2,127 1,121 2,752  6,000  12  12  6,012                   |
| China Puguang Fuling Others Overseas Subtotal Equity-accounted investments China Overseas Subtotal Total Proved Developed Undeveloped Subsidiaries China Puguang  | 6,000 2,127 1,121 2,752 — 6,000  12 12 6,012                    |
| China Puguang Fuling Others Overseas Subtotal Equity-accounted investments China Overseas Subtotal Total Proved Developed Undeveloped Subsidiaries China Puguang Fuling   | 6,000 2,127 1,121 2,752 — 6,000  - 12 12 6,012                  |
| China Puguang Fuling Others Overseas Subtotal Equity-accounted investments China Overseas Subtotal Total Proved Developed Undeveloped Subsidiaries China Puguang Fuling Others Overseas Subtotal  | 6,000 2,127 1,121 2,752 — 6,000  - 12 12 6,012                  |
| China Puguang Fuling Others Overseas Subtotal Equity-accounted investments China Overseas Subtotal Total Proved Developed Undeveloped Subsidiaries China Puguang Fuling Others Overseas Subtotal Equity-accounted investments   | 6,000 2,127 1,121 2,752 — 6,000  - 12 12 6,012  985 — 187 798   |
| China Puguang Fuling Others Overseas Subtotal  Equity-accounted investments China Overseas Subtotal  Total Proved Developed Undeveloped Subsidiaries China Puguang Fuling Others Overseas Subtotal  Equity-accounted investments China Puguang Fuling Others Others Overseas Subtotal  Equity-accounted investments China | 6,000 2,127 1,121 2,752 — 6,000  - 12 12 6,012  985 — 187 798   |
| China Puguang Fuling Others Overseas Subtotal  Equity-accounted investments China Overseas Subtotal  Total Proved Developed Undeveloped Subsidiaries China Puguang Fuling Others Overseas Subtotal  Equity-accounted investments China Overseas Subtotal  Equity-accounted investments China Overseas                     | 6,000 2,127 1,121 2,752 — 6,000  - 12 12 6,012  985 — 187 798   |
| China Puguang Fuling Others Overseas Subtotal  Equity-accounted investments China Overseas Subtotal  Total Proved Developed Undeveloped Subsidiaries China Puguang Fuling Others Overseas Subtotal  Equity-accounted investments China Puguang Fuling Others Others Overseas Subtotal  Equity-accounted investments China | 6,000 2,127 1,121 2,752 — 6,000  - 12 12 6,012  985 — 187 798   |
| China Puguang Fuling Others Overseas Subtotal  Equity-accounted investments China Overseas Subtotal  Total Proved Developed Undeveloped Subsidiaries China Puguang Fuling Others Overseas Subtotal  Equity-accounted investments China Overseas Subtotal  Equity-accounted investments China Overseas                     | 6,000 2,127 1,121 2,752 — 6,000  - 12 1,12 6,012  985 — 187 798 |

As of December 31, 2017, approximately 170 million barrels of our crude oil proved reserves and 985 billion cubic feet of our natural gas proved reserves were classified as proved undeveloped reserves in China and overseas. 2 million barrels of crude oil and 33 billion cubic feet natural gas proved reserves in China have been classified as proved undeveloped for more than five years, mainly under Sinopec Shanghai Offshore Petroleum Company, one of our subsidiaries.

During 2017, a total of 312 wells were drilled by us in China and 122 wells were drilled overseas. We converted 41 million barrels of proved undeveloped crude oil reserves and 33 billion cubic feet of proved undeveloped natural gas reserves into proved developed reserves in 2017. Proved developed reserves of natural gas increased from 724 billion cubic feet at the beginning of the year to 985 billion cubic feet at the end of the year. Total capital expenditure incurred in converting proved undeveloped reserves into proved developed reserves amounted to RMB 5.7 billion, including RMB 5.1 billion and RMB 0.6 billion incurred in connection with our operations in China and overseas, respectively, in 2017.

We manage our reserves estimation through a two-tier management system. The Oil and Natural Gas Reserves Management Committee, or the RMC, at our headquarters level oversees the overall reserves estimation process and reviews the reserves estimation of our company. Each of our Branches has a reserves committee that manages the reserves estimation process and reviews the reserves estimation report at the branches level.

Our RMC is co-led by several of our senior vice presidents and the head of our exploration and production segment. The current chairman of our RMC, Mr. Jiao Fangzheng, holds a Ph.D. degree in petroleum and natural gas engineering and has over 30 years of experience in the oil and gas industry. The rest of the members of our RMC are all senior management members in charge of exploration and development activities at production bureau level. A majority of our RMC members hold doctor's or master's degrees and our RMC members have an average of 20 years of technical experience in relevant industry fields, such as geology, engineering and economics.

Our reserves estimation is guided by procedural manuals and technical guidance. Initial collection and compilation of reserves information are conducted by different working divisions, including exploration, development and financial divisions, at production bureau level. Exploration and development divisions collectively prepare the initial report on reserves estimation. Together with technical experts, reserves management committees at production bureau level then review to ensure the qualitative and quantitative compliance with technical guidance and accuracy and reasonableness of the reserves estimation. At our headquarters level, the RMC is primarily responsible for the management and coordination of the reserves estimation process, review and approval of annual changes and results in reserves estimation and disclosure of our proved reserves. We also engage outside consultants who assist us to be in compliance with the U.S. Securities and Exchange Commission rules and regulations. Our reserves estimation process is further facilitated by a specialized reserves database which is reviewed and updated periodically.

#### Oil and Natural Gas Production

In 2017, we produced an average of 1,105 thousand BOE per day in China, of which approximately 61.7% was crude oil and 38.3% was natural gas. We produced an average of 124 thousand BOE per day overseas, of which 98.4% was crude oil and 1.6% was natural gas.

The following tables set forth our average daily production of crude oil and natural gas for the years ended December 31, 2015, 2016 and 2017. The production of crude oil includes condensate.

|                                    | Yea  | Year Ended December 31, |      |  |  |  |  |
|------------------------------------|------|-------------------------|------|--|--|--|--|
|                                    | 2015 | 2016                    | 2017 |  |  |  |  |
|                                    | (in  | thousands of barrels)   |      |  |  |  |  |
| Average Daily Crude Oil Production |      |                         |      |  |  |  |  |
| China                              | 812  | 692                     | 682  |  |  |  |  |
| Subsidiaries                       | 812  | 692                     | 682  |  |  |  |  |
| Shengli                            | 527  | 464                     | 455  |  |  |  |  |
| Others                             | 285  | 228                     | 227  |  |  |  |  |
| Overseas                           | 146  | 138                     | 122  |  |  |  |  |
| Subsidiary                         | 54   | 51                      | 41   |  |  |  |  |
| Equity-accounted investments       | 92   | 87                      | 81   |  |  |  |  |
| Total Crude Oil Production         | 958  | 830                     | 804  |  |  |  |  |
|                                    |      |                         |      |  |  |  |  |

|                                      | Year Ended December 31, |                         |       |  |  |
|--------------------------------------|-------------------------|-------------------------|-------|--|--|
|                                      | 2015                    | 2016                    | 2017  |  |  |
|                                      | (in                     | millions of cubic feet) |       |  |  |
| Average Daily Natural Gas Production |                         |                         |       |  |  |
| China                                | 1,952                   | 2,083                   | 2,490 |  |  |
| Subsidiaries                         | 1,952                   | 2,083                   | 2,490 |  |  |
| Puguang                              | 530                     | 362                     | 558   |  |  |
| Fuling                               | 306                     | 486                     | 581   |  |  |
| Others                               | 1,116                   | 1,235                   | 1,351 |  |  |
| Overseas                             | 11                      | 10                      | 10    |  |  |
| Equity-accounted investments         | 11                      | 10                      | 10    |  |  |
| Total Natural Gas Production         | 1,963                   | 2,093                   | 2,500 |  |  |

#### Lifting Cost & Realized Prices

The following table sets forth our average lifting costs per BOE of crude oil produced, average sales prices per barrel of crude oil and average sales prices per thousand cubic meters of natural gas for the years ended December 31, 2015, 2016 and 2017.

|  | Weighted Average | China (RMB) | Overseas <sup>(1)</sup> |
|--|------------------|-------------|-------------------------|
| For the year ended December 31, 2017     |                  |             |                         |
| Average petroleum lifting cost per BOE   | 107.53           | 111.47      | 85.52                   |
| Average realized sales price             |                  |             |                         |
| Per barrel of crude oil                  | 332.60           | 327.06      | 363.6                   |
| Per thousand cubic meters of natural gas | 1,185.53         | 1,185.53    | _                       |
| For the year ended December 31, 2016     |                  |             |                         |
| Average petroleum lifting cost per BOE   | 108.21           | 112.19      | 77.62                   |
| Average realized sales price             |                  |             |                         |
| Per barrel of crude oil                  | 240.70           | 246.10      | 213.41                  |
| Per thousand cubic meters of natural gas | 1,266.03         | 1,266.03    | _                       |
| For the year ended December 31, 2015     |                  |             |                         |
| Average petroleum lifting cost per BOE   | 109.70           | 111.56      | 72.20                   |
| Average realized sales price             |                  |             |                         |
| Per barrel of crude oil                  | 283.72           | 280.74      | 316.15                  |
| Per thousand cubic meters of natural gas | 1,519.83         | 1,519.83    | _                       |

<sup>(1)</sup> The exchange rates we used for overseas data in this table were exchange rates for each year ended December 31, 2015, 2016 and 2017, which were RMB 6.2284 to US\$1.00, RMB 6.6400 to US\$ 1.00 and RMB 6.7518 to US\$ 1.00, respectively.

# **Exploration and Development Activities**

In the low oil price environment in 2017, we prioritized low-cost and high-quality exploration activities. We continued our efforts in exploration activities, focused on increasing efficiency and effectiveness, reducing our inefficient crude oil production and high cost activities, and completed the construction of the second phase of our Fuling shale gas project.

The following table sets forth the numbers of our exploratory and development wells, including a breakdown of productive wells and dry wells we drilled during the years ended December 31, 2015, 2016 and 2017.

|                  | As of December 31, |      |                   |      |                   |      |                   |      |                   |      |                   |      |
|------------------|--------------------|------|-------------------|------|-------------------|------|-------------------|------|-------------------|------|-------------------|------|
| 2015             |                    |      |                   |      | 2016              |      |                   |      | 2017              |      |                   |      |
| Number of        | Explora            | tory | Developr          | nent | Explora           | tory | Develop           | nent | Explorat          | tory | Developr          | nent |
| Drilled Wells    | <b>Productive</b>  | Dry  | <b>Productive</b> | Dry  | <b>Productive</b> | Dry  | <b>Productive</b> | Dry  | <b>Productive</b> | Dry  | <b>Productive</b> | Dry  |
| China            | 373                | 195  | 1,801             | 25   | 266               | 149  | 801               | 6    | 266               | 149  | 1,442             | 9    |
| Subsidiaries     | 373                | 195  | 1,801             | 25   | 266               | 149  | 801               | 6    | 266               | 149  | 1,442             | 9    |
| Shengli          | 150                | 73   | 1,020             | 18   | 166               | 73   | 462               | 5    | 151               | 71   | 845               | 1    |
| Others           | 223                | 122  | 781               | 7    | 100               | 76   | 339               | 1    | 115               | 78   | 597               | 8    |
| Overseas         |                    | 1    | 149               | 1    | 2                 | 1    | 99                | _    | 2                 | 1    | 119               | —    |
| Subsidiaries     | _                  | _    | 5                 | _    | _                 | _    |                   | _    |                   | _    |                   | _    |
| Equity-accounted |                    |      |                   |      |                   |      |                   |      |                   |      |                   |      |
| investments      |                    | 1    | 144               | 1    | 2                 | 1    | 99                |      | 2                 | 1    | 119               |      |
| Total            | 373                | 196  | 1,950             | 26   | 268               | 150  | 900               | 6    | 268               | 150  | 1,561             | 9    |

The following table sets forth the number of wells being drilled by us as of December 31, 2017, as compared to December 31, 2016:

|                               | As of December 31, |             |             |             |             |             |             |             |
|-------------------------------|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                               | 2016               |             |             |             | 20          | 17          |             |             |
|                               | Gr                 | oss         | N           | let         | Gr          | oss         | N           | et          |
| Number of Drilling<br>Welling | Exploratory        | Development | Exploratory | Development | Exploratory | Development | Exploratory | Development |
| China                         | 78                 | 138         | 78          | 138         | 62          | 147         | 62          | 147         |
| Subsidiaries                  | 78                 | 138         | 78          | 138         | 62          | 147         | 62          | 147         |
| Shengli                       | 28                 | 21          | 28          | 21          | 19          | _           | 19          | _           |
| Others                        | 50                 | 117         | 50          | 117         | 43          | 147         | 43          | 147         |
| Overseas                      | _                  | 2           | _           | 2           | _           | 5           | _           | 5           |
| Subsidiaries                  |                    |             |             |             |             |             |             |             |
| Equity-accounted              |                    |             |             |             |             |             |             |             |
| investments                   |                    | 2           |             | 2           |             | 5           |             | 5           |
| Total                         | 78                 | 140         | 78          | 140         | 62          | 152         | 62          | 152         |

The following table sets forth our number of productive wells for crude oil and natural gas as of December 31, 2017, as compared to December 31, 2016:

|                              | As of December 31, |        |        |        |        |        |
|------------------------------|--------------------|--------|--------|--------|--------|--------|
|                              | 2015               |        | 2016   |        | 2017   |        |
| Productive Wells for         |                    |        |        |        |        |        |
| Crude Oil                    | Gross              | Net    | Gross  | Net    | Gross  | Net    |
| China                        | 49,662             | 49,662 | 49,921 | 49,921 | 50,121 | 50,121 |
| Subsidiaries                 | 49,662             | 49,662 | 49,921 | 49,921 | 50,121 | 50,121 |
| Shengli                      | 31,547             | 31,547 | 32,019 | 32,019 | 32,105 | 32,105 |
| Others                       | 18,115             | 18,115 | 17,902 | 17,902 | 18,016 | 18,016 |
| Overseas                     | 6,913              | 3,122  | 7,432  | 3,614  | 7,350  | 3,968  |
| Subsidiaries                 | 28                 | 15     | 28     | 14     | 28     | 14     |
| Equity-accounted investments | 6,885              | 3,107  | 7,404  | 3,600  | 7,322  | 3,954  |
| Total                        | 56,575             | 52,784 | 57,353 | 53,535 | 57,471 | 54,089 |
|                              |                    |        |        |        |        |        |

|                                     | As of December 31, |       |       |       |       |       |  |
|-------------------------------------|--------------------|-------|-------|-------|-------|-------|--|
|                                     | 201:               | 5     | 201   | 2016  |       | 2017  |  |
| Productive Wells for<br>Natural Gas | Gross              | Net   | Gross | Net   | Gross | Net   |  |
| China                               | 4,758              | 4,727 | 4,966 | 4,932 | 4,800 | 4,762 |  |
| Subsidiaries                        | 4,758              | 4,727 | 4,966 | 4,932 | 4,800 | 4,762 |  |
| Puguang                             | 55                 | 55    | 57    | 57    | 57    | 57    |  |
| Fuling                              | 175                | 175   | 253   | 253   | 266   | 266   |  |
| Others                              | 4,528              | 4,497 | 4,656 | 4,622 | 4,477 | 4,439 |  |
| Total                               | 4,758              | 4,727 | 4,966 | 4,932 | 4,800 | 4,762 |  |

#### Refining

#### **Overview**

In 2017, our refinery throughputs were approximately 239 million tonnes. We produce a full range of refined oil products. The following table sets forth our production of our principal refined oil products for the years ended December 31, 2015, 2016 and 2017

|                          | Y     | Year Ended December 31, |       |  |  |
|--------------------------|-------|-------------------------|-------|--|--|
|                          | 2015  | 2015 2016               |       |  |  |
|                          |       | (in million tonnes)     |       |  |  |
| Gasoline                 | 53.98 | 56.36                   | 57.03 |  |  |
| Diesel                   | 70.05 | 67.34                   | 66.76 |  |  |
| Kerosene                 | 24.35 | 25.47                   | 26.88 |  |  |
| Light chemical feedstock | 38.81 | 38.54                   | 38.60 |  |  |
| Liquefied petroleum gas  | 11.58 | 12.12                   | 12.37 |  |  |
| Fuel oil                 | 1.48  | 0.94                    | 0.80  |  |  |

Gasoline and diesel are our largest revenue-generating products, and are sold mostly through our marketing and distribution segment through both wholesale and retail channels. We use most of our production of chemical feedstock as feedstock for our own chemical operations. Most of our other refined oil products were sold in China to a wide variety of industrial and agricultural customers, and a small amount is exported.

#### Refining Facilities

Currently we operate 30 refineries in China. As of December 31, 2017, our total primary distillation capacity of crude oil was 295 million tonnes per annum.

The following table sets forth our total primary distillation capacity per annum of crude oil and refinery throughputs as of and for the years ended December 31, 2015, 2016 and 2017.

|  | As of and for the Year Ended December 31, |       |       |
|--|---|-------|-------|
|  | 2015                                      | 2016  | 2017  |
| Primary distillation capacity of crude oil (million tonnes per annum) <sup>(1)</sup> | 293.2                                     | 294.7 | 294.7 |
| Refinery throughputs (million tonnes) <sup>(2)</sup>                                 | 236.5                                     | 235.5 | 238.5 |

<sup>(1)</sup> The primary distillation capacity and refinery throughputs of joint ventures are fully included in our statistics.

(2) When calculating refinery throughputs, conversion from tonnes to barrels are made at a rate of one tonne to 7.35 barrels.

In 2017, our gasoline yield was 22.08%, diesel yield was 25.84%, kerosene yield was 10.41%, and light chemical feedstock yield was 14.94%. Other products include lubricant, liquefied petroleum gas, solvent, asphalt, petroleum coke, paraffin and fuel oil. For the years ended December 31, 2015, 2016 and 2017, our overall yield for all refined oil products at our refineries was 94.75%, 94.70% and 94.88%, respectively.

The following table sets forth the primary distillation capacity per annum as of December 31, 2017 of each of our refineries with the primary distillation capacity of 8 million tonnes or more per annum.

| Refinery     | Primary Distillation Capacity as of December 31, 2017 |
|--------------|---|
|              | (in million tonnes per annum)                         |
| Maoming      | 23.5  |
| Zhenhai      | 23.0  |
| Jinling      | 21.0  |
| Shanghai     | 16.0  |
| Qilu         | 14.0  |
| Yangzi       | 14.0  |
| Fujian       | 14.0  |
| Tianjin      | 13.8  |
| Guangzhou    | 13.2  |
| Gaoqiao      | 13.0  |
| Qingdao      | 12.0  |
| Changling    | 11.5  |
| Yanshan      | 11.0  |
| Shijiazhuang | 10.0  |
| Jiujiang     | 10.0  |
| Hainan       | 9.2   |
| Luoyang      | 8.0   |
| Wuhan        | 8.0   |

In 2017, our primary distillation capacity of crude oil remained the same. In addition, in 2017, our hydrofining capacity increased by 1.8 million tonnes per annum. The revamping projects for a number of refining facilities to improve refined oil product quality were also completed and put into operation.

#### Source of crude oil

In 2017, approximately 88% of the crude oil required for our refinery business was imported.

### **Marketing and Sales of Refined Oil Products**

#### Overview

We operate the largest sales and distribution network for refined oil products in China. In 2017, we distributed and sold approximately 178 million tonnes of gasoline, diesel and kerosene domestically. Most of the refined oil products sold by us are produced internally. In 2017, approximately 67% of our gasoline sales volume and approximately 78% of our diesel sales volumes were produced internally.

The table below sets forth a summary of key data in the marketing and sales of refined oil products in the years of 2015, 2016 and 2017.

|  | As of December 31, |        |        |
|--|--------------------|--------|--------|
|  | 2015               | 2016   | 2017   |
| Total sales volume of refined oil products (in million tonnes)           | 189.33             | 194.84 | 198.75 |
| <b>Domestic sales volume of refined oil products</b> (in million tonnes) | 171.37             | 172.70 | 177.76 |
| Retail   | 119.03             | 120.14 | 121.56 |
| Wholesale and Distribution   | 52.34              | 52.56  | 56.20  |
| Average annual throughput of service stations (in tonnes per station)    | 3,896              | 3,926  | 3,969  |

|  | A      | s of December 31, |        |
|--|--------|-------------------|--------|
|  | 2015   | 2016              | 2017   |
| Total number of service stations under Sinopec brand | 30,560 | 30,603            | 30,633 |
| Self-operated service stations                       | 30,547 | 30,597            | 30,627 |

#### Retail

All of our retail sales are made through a network of service stations and petroleum shops operated under the Sinopec brand. Through this unified network we are able to implement consistent pricing policies, maintain both product and service quality standards and more efficiently deploy our retail network.

In 2017, we sold approximately 121.56 million tonnes of gasoline, diesel and kerosene through our retail network, representing approximately 68.4% of our total domestic gasoline, diesel, jet fuel and kerosene sales volume. Our retail network mainly consists of service stations that are wholly-owned and operated by us, and jointly-owned and generally operated or leased by us, all of which are operated under the Sinopec brand. We also franchised the Sinopec brand to third parties services stations. As of December 31, 2017, we had 6 franchised service stations that are owned and operated by third parties. In 2017, the average annual throughput of our service stations increased slightly from 2016, and we have further strengthened our leading position in our principal market, and further improved our brand awareness and customer loyalty.

#### Wholesale and Distribution

In 2017, we sold approximately 56.20 million tonnes of refined oil products, including 10.76 million tonnes of gasoline, 28.77 million tonnes of diesel and 16.67 million tonnes of kerosene, through wholesale and distribution to independent distributors such as domestic industrial enterprises, hotels, restaurants and agricultural producers and long-term large-scale end users such as railways, airlines, shipping and public utilities.

We operate 353 storage facilities with a total capacity of approximately 18.58 million cubic meters, substantially all of which are wholly-owned by us. These storage facilities and our wholesale centers are connected to our refineries by railway, waterway and pipelines. We also own some dedicated railways, oil wharfs and oil barges, as well as a number of rail tankers and oil trucks.

#### Chemicals

#### **Overview**

We are the largest petrochemicals producer and distributor in China, with our petrochemical production plants located in economically developed regions such as central, eastern and southern China. We produce and distribute a full range of chemical products including intermediate petrochemicals, synthetic resins, synthetic fiber monomer and polymers, synthetic fibers and synthetic rubber. Synthetic resins, synthetic rubber comprise a significant majority of our external sales. Synthetic fiber monomer and polymers and intermediate petrochemicals, on the other hand, are mostly internally consumed as feedstock for the production of other chemical products. Our chemical operations are integrated upstream and downstream with our refining businesses, which supply a significant portion of our chemical feedstock such as naphtha. Due to the high demand in China, we sell substantially all of our chemical products in China.

#### **Products**

#### Intermediate Petrochemicals

We are the largest ethylene producer in China. Our rated ethylene capacity as of December 31, 2017 was 11.13 million tonnes per annum. In 2017, we produced 11.61 million tonnes of ethylene. Nearly all of our olefins production is used as feedstock for our petrochemical operations.

We produce aromatics mainly in the forms of benzene and para-xylene, which are used primarily as feedstock for purified terephthalic acid, or PTA, the preferred raw material for polyester. We are the largest aromatics producer in China.

Chemicals extracted from olefins and aromatics are mainly used to produce synthetic resins, synthetic rubber and synthetic fibers, as well as intermediate petrochemicals.

The following table sets forth our rated capacity per annum, production volume and major plants of production as of or for the year ended December 31, 2017 for our principal intermediate chemical products.

|             | Our Rated Capacity (thousand tonnes per annum) | Our Production (thousand tonnes) | Major Plants of Production   |
|-------------|--|----------------------------------|--|
| Ethylene    | 11,128   | 11,610                           | Yanshan, Shanghai, Yangzi, Qilu,<br>Maoming, Guangzhou, Tianjin,<br>Zhongyuan, Shanghai SECCO*, BASF-<br>YPC*, Fujian, Zhongsha (Tianjing)*,<br>Zhenhai, Sino-Korean (Wuhan)* and<br>Great Wall EC*                                      |
| Propylene   | 10,210   | 9,397                            | Yanshan, Shanghai, Yangzi, Qilu,<br>Maoming, Guangzhou, Tianjin,<br>Zhongyuan, Shanghai SECCO*, BASF-<br>YPC*, Jinling, Anqing, Qingdao, Hainan,<br>Fujian, Zhongsha (Tianjing)*, Zhenhai,<br>Sino-Korean (Wuhan)* and Great Wall<br>EC* |
| Benzene     | 5,363  | 4,155                            | Yanshan, Shanghai, Yangzi, Qilu,<br>Guangzhou, Zhenhai, Tianjin, Luoyang,<br>Shanghai SECCO*, BASF-YPC*,<br>Fujian*, Maoming, Hainan and Sino-<br>Korean (Wuhan)*, Jinling   |
| Styrene     | 2,303  | 2,349                            | Zhenhai, Yanshan, Qilu, Guangzhou,<br>Maoming, Shanghai SECCO*, Anqing<br>and BASF-YPC*  |
| Para-xylene | 4,839  | 4,625                            | Shanghai, Yangzi, Qilu, Tianjin,<br>Luoyang, Zhenhai, Jinling, Fujian* and<br>Hainan   |
| Phenol      | 758  | 709                              | Yanshan, Gaoqiao and Zhongsha (Tianjin)*   |

<sup>\*</sup> Joint ventures, of which the production capacities and outputs are fully included in our statistics; Shanghai SECCO became our wholly owned subsidiary in November 2017.

Synthetic Resins

We are the largest producer of polyethylene, polypropylene and polystyrene and supplier of major synthetic resins products in China.

The following table sets forth our rated capacity per annum, production volumes and major plants of production for each of our principal synthetic resins as of or for the year ended December 31, 2017.

|                                 | Our Rated Capacity (thousand tonnes per annum) | Our<br>Production<br>(thousand<br>tonnes) | Major Plants of Production   |
|---------------------------------|--|---|--|
| Polyethylene                    | 7,564  | 7,486                                     | Yanshan, Shanghai, Yangzi, Qilu,<br>Maoming, Guangzhou, Tianjin,<br>Zhongyuan, Shanghai SECCO*, BASF-<br>YPC*, Fujian, Zhongsha (Tianjing)*,<br>Zhenhai, Sino-Korean (Wuhan)* and<br>Great Wall EC*  |
| Polypropylene                   | 7,409  | 7,082                                     | Yanshan, Shanghai, Yangzi, Qilu,<br>Guangzhou, Maoming, Tianjin,<br>Zhongyuan, Shanghai SECCO*, Fujian,<br>Zhongsha (Tianjing)*, Zhenhai, Sino-<br>Korean (Wuhan)*, Great Wall EC*,<br>Luoyang, Jiujiang, Jingmen, Hainan,<br>Beihai, and Shijiazhuang |
| Polyvinyl chloride              | 600  | 203                                       | Qilu   |
| Polystyrene                     | 698  | 630                                       | Yanshan, Qilu, Maoming, Guangzhou, and Shanghai SECCO*   |
| Acrylonitrile butadiene styrene | 200  | 180                                       | Gaoqiao  |

<sup>\*</sup> Joint ventures, of which the production capacities and outputs are fully included in our statistics; Shanghai SECCO became our wholly owned subsidiary in November 2017.

Synthetic Fiber Monomers and Polymers

Our principal synthetic fiber monomers and polymers are purified terephthalic acid, ethylene glycol, acrylonitrile, caprolactam, polyester, polyethylene glycol and polyamide fiber. Based on our 2017 production, we are the largest producer of ethylene glycol and caprolactam in China.

The following table sets forth our rated capacity per annum, our production volume and major plants of production as of or for the year ended December 31, 2017 for each type of our principal synthetic fiber monomers and polymers.

|                            | Our Rated<br>Capacity          | Our<br>Production    | Major Plants of Production  |
|----------------------------|--------------------------------|----------------------|---|
|                            | (thousand tonnes<br>per annum) | (thousand<br>tonnes) |   |
| Purified terephthalic acid | 3,119                          | 2,248                | Shanghai, Yangzi, Yizheng, Tianjin and Luoyang  |
| Ethylene glycol            | 3,209                          | 2,690                | Yanshan, Shanghai, Yangzi, Tianjin,<br>Maoming, BASF-YPC*, Zhongsha<br>(Tianjing)*, Zhenhai |
| Acrylonitrile              | 1,070                          | 979                  | Anging, Qilu and Shanghai SECCO*  |
| Caprolactam                | 709                            | 589                  | Baling and Shijiazhuang   |
| Polyester                  | 3,393                          | 2,723                | Shanghai, Yizheng, Tianjin and Luoyang  |

<sup>\*</sup> Joint ventures, of which the production capacities and outputs are fully included in our statistics; Shanghai SECCO became our wholly owned subsidiary in November 2017.

Synthetic Fibers

We are the largest producer of acrylic fibers in China. Our principal synthetic fiber products are polyester fiber and acrylic fiber.

The following table sets forth our rated capacity per annum, production volume and major plants of production for each type of our principal synthetic fibers as of or for the year ended December 31, 2017.

|                 | Our Rated<br>Capacity          | Our<br>Production    |       | Major Plants of Production             |
|-----------------|--------------------------------|----------------------|-------|--|
|                 | (thousand tonnes<br>per annum) | (thousand<br>tonnes) |       |  |
| Polyester fiber | 1,231                          |                      | 1,006 | Yizheng, Shanghai, Tianjin and Luoyang |
| Acrylic fiber   | 265                            |                      | 208   | Shanghai, Anqing and Qilu              |
|                 |                                | 26                   |       |  |

Synthetic Rubbers

Our principal synthetic rubbers are cis-polybutadiene rubber, styrene butadiene rubber, or SBR, styrene butadiene-styrene thermoplastic elastomer and isobutadiene isoprene rubber, or IIR. Based on our 2017 production, we are the largest producer of SBR and cis-polybutadiene rubber in China.

The following table sets forth our rated capacity per annum, production volume and major plants of production as of or for the year ended December 31, 2017 for each of our principal synthetic rubbers.

| _  | Our Rated<br>Capacity          | Our<br>Production    | Major Plants of Operation         |
|--|--------------------------------|----------------------|-----------------------------------|
|  | (thousand tonnes<br>per annum) | (thousand<br>tonnes) |                                   |
| Cis-polybutadiene rubber                           | 420                            | 363                  | Yanshan, Qilu, Maoming and Yangzi |
| Styrene butadiene rubber                           | 430                            | 316                  | Qilu, Gaoqiao and Yangzi          |
| Styrene-butadiene-styrene thermoplastic elastomers | 340                            | 96                   | Yanshan and Maoming               |
| Isobutylene isoprene rubber                        | 125                            | 13                   | Yanshan                           |
| Isoprene rubber                                    | 30                             | _                    | Yanshan                           |
| Ethylene propylene rubber                          | 75                             | 62                   | Gaoqiao                           |

#### Marketing and Sales of Petrochemicals

The central, eastern and southern regions in China, where most of our petrochemical plants are located, constitute the major petrochemical market in China. Our proximity to the major petrochemical market gives us a geographic advantage over our competitors.

The prices of petrochemical products in China have become market-oriented. Our principal sales channels consist of (i) direct sales to domestic and foreign large- and medium-sized manufacturing enterprises, which account for more than 74% of our direct sales, (ii) sales to distributors, who are responsible for sales and distribution to a portion of our smaller and scattered customers or specific customers, and (iii) sales of chemical products through our e-commerce platform "Chem E-Mall", which effectively expands our traditional sales channels and provides new options for procurement.

#### Competition

According to the Measures for the Administration of Overseas Investment of Enterprises (Decree No. 11 of 2017 of the National Development and Reform Commission), when an investment entity conducts overseas investment, it shall undergo the formalities for the confirmation or recordation of overseas investment projects, report relevant information, and cooperate in supervision and inspection. The scope of implementation of confirmation management is sensitive projects conducted by investors directly or through overseas enterprises controlled by them, including projects involving sensitive countries and regions, and projects involving sensitive industries. The scope of the implementation of recordation management is non-sensitive projects that are directly conducted by investors, namely, non-sensitive projects that involve investors' direct contribution of assets or rights and interests or provision of financing or security. The confirmation or recordation authority is the National Development and Reform Commission (NDRC)

In accordance with the Administrative Measures Confirmation or Recordation of Overseas Investment Projects (NDRC Decree No. 9 of 2014) and the Decision of NDRC on Amending the Relevant Clauses of the Administrative Measures for the Confirmation or Recordation of Outbound Investment Projects and Administrative Measures for the Approval and Record-Filing of Foreign Investment Projects (NDRC Decree No. 20), overseas investment projects involving sensitive countries or regions or sensitive industries shall be confirmed by NDRC, among which, projects with the amount of Chinese investment over US\$ 2 billion shall be subject to an examination opinion of NDRC after being reported to the State Council for confirmation. All other projects, including those by enterprises directly administered by the SASAC and local enterprises with an investment size over US\$3 billion, will require only a recordation with NDRC.

Pursuant to the Anti-Monopoly Law of the PRC which became effective on August 1, 2008, when market concentration by business carriers through merger, acquisition of control through shares or assets acquisition, or acquisition of control or the ability to exercise decisive influence over other business carriers by contract or by other means reaches a threshold of declaration level prescribed by the State Council, the business carriers shall declare in advance to the Anti-monopoly Law enforcement agency, otherwise, the business carriers shall not implement such market concentration.

#### Refining and Marketing of Refined Oil Products

Market participants compete primarily on the basis of wide-established sales network and logistics system, quality of products and service, efficiency of operations including proximity to customers, awareness of brand name and price. While we constantly face competition from other market participants, we believe that we have a competitive advantage in our principal market against our competitors.

#### **Chemicals**

We compete with domestic and foreign chemicals producers in the chemicals market. We adopt the strategy of "one product one policy, one customer one case" to meet customers' needs, tailor supply secured plans for customers, provide customized services, and strive to create value for customers. Our petrochemical production facilities' proximity to customers has given us significant regional advantages over our competitors in terms of easy access to our customers, resulting in lower transportation costs, more reliable delivery of products and better service to customers.

#### **Patents and Trademarks**

In 2017, we were granted 3,640 patents in China and overseas. As of December 31, 2017, we owned a total of 25,931 patents in China and overseas.

In 2017, we have 391 material trademarks approved internally, among which 241 are registered in China and 150 registered overseas

#### Business Operations Relating to Iran Threat Reduction and Syria Human Rights Act of 2012

In 2017, we sourced approximately 8.57% of our total refinery throughputs of crude oil from Iran. In addition, we engaged in a small amount of trading activities with an Iranian company which generated us a net profit of approximately US\$2.32 million.

Based on feedback to our inquiries to Sinopec Group Company, our controlling shareholder, Sinopec Group Company engaged in a small amount of business activities in Iran such as providing engineering services and designs. Sales revenue from these business activities accounted for 0.0001% of its total unaudited sales revenue.

Since we have performance obligations under our Iran-related contracts, we are contractually required to continue our performance under our Iran-related contracts in 2018.

### **Regulatory Matters**

#### Overview

China's petroleum and petrochemical industry has seen significant liberalization in the past ten years. However, the exploration, production, marketing and distribution of crude oil and natural gas, as well as the production, marketing and distribution of certain refined oil products are still subject to regulation of many government agencies including:

National Development and Reform Commission (NDRC)

NDRC is responsible for formulating and implementing key policies in respect of petroleum and petrochemical industry, including:

- Formulating guidance plan for annual production, import and export amount of crude oil, natural gas and petroleum products nationwide based on its forecast on macro-economic conditions in China;
- Setting the pricing policy for refined oil products;
- Approving certain domestic and overseas resource investment projects which are subject to NDRC's approval as required by the Catalogue of Investment Projects Approved by the Government in effect; and

National Energy Administration (NEA)

NEA is primarily responsible for the formulation of energy development plans and annual directive plans, approving major energy-related projects and facilitating the implementation of sustainable development of energy strategies, coordinating the development and utilization of renewable energies and new energies, and organizing matters relating to energy conservation and comprehensive utilization as well as environmental protection for the energy industry.

The Ministry of Commerce (MOFCOM)

MOFCOM is responsible for the record-filing of Sino-foreign equity joint venture contracts and Sino-foreign cooperation joint venture contracts, and monitoring the foreign investors' oil and gas exploration projects in the PRC. It is responsible for approving or filing of the overseas investment by PRC enterprises and issuing the enterprise overseas investment certificate and quotas and licenses for import and export of crude oil and refined oil products. According to the law, MOFCOM is also responsible for supervising, approving and record-filing of foreign investment (excluding financial investment) of domestic enterprises.

Ministry of Land and Resources (MLR)

The MLR is responsible for issuing the licenses that are required to explore and produce crude oil and natural gas in China.

#### Regulation of Exploration and Production

Exploration and Production Rights

The PRC Constitution provides that all mineral and oil resources belong to the state. In 1986, the Standing Committee of the National People's Congress passed the Mineral Resources Law which authorizes the Ministry of Land and Resources, or the MLR, to exercise administrative authority over the exploration and production of the mineral and oil resources within the PRC, including its territorial waters. The Mineral Resources Law and its supplementary regulations provide the basic legal framework under which exploration licenses and production licenses are granted. The MLR has the authority to grant exploration licenses and production licenses on a competitive bidding or other basis it considers appropriate. Applicants for these licenses must be companies approved by the State Council to engage in oil and gas exploration and production activities. Currently, we are one of the few companies that have received such exploration licenses and production licenses in oil and gas industry. In addition, pursuant to the Regulation on the Administration of Geological Survey Qualifications promulgated by the State Council, which became effective from July 1, 2008, any entity engaging in geological survey activities shall obtain a geological survey qualification certificate. Oil and natural gas survey qualifications, among others, shall be examined, approved and granted by the MLR.

Applicants for exploration licenses must first submit applications to the MLR with respect to blocks in which they intend to engage in exploration activities. The holder of an exploration license is obligated to make an annual minimum exploration investment and pay annual exploration license fees, ranging from RMB 100 to RMB 500 per square kilometer, relating to the exploration blocks in respect of which the license is issued. The maximum term of an oil and gas exploration license is 7 years. Such exploration license may be renewed upon application by the holder at least 30 days prior to expiration date, with each renewal for a maximum two-year term. Under the PRC laws and regulations, we are entitled for reductions and exemptions of exploration license fees for exploration in the western, offshore and northeastern regions of China.

At the exploration stage, an applicant can also apply for a progressive exploration and production license that allows the holder to test and develop reserves not yet fully proved. The progressive oil and gas exploration and production license has a maximum term of 15 years. When the reserves become proved for a block, the holder must apply for a full production license in order to undertake production.

The MLR issues full production licenses to applicants on the basis of the reserve reports approved by relevant authorities. The maximum term of a full production license is 30 years unless a special dispensation is given by the State Council. Due to a special dispensation granted to us by the State Council, the maximum term of our full production licenses is 80 years. The full production license is renewable upon application by the holder at least 30 days prior to expiration of the original term. A holder of the full production license has to pay an annual full production right usage fee of RMB 1,000 per square kilometer.

Exploration and production licenses do not grant the holders the right to enter upon any land for the purpose of exploration and production. Holders of exploration and production licenses must separately obtain the right to use the land covered by the licenses, and if permissible under applicable laws, current owners of the rights to use such land may transfer or lease the land to the license holder.

#### Incentives for Shale Gas Development

In order to incentivize the exploration, discovery and development of China's shale gas reserves, to increase the supply of natural gas and to relieve the imbalance between supply and demand of natural gas, the Ministry of Finance of China and China National Energy Administration issued the Notice on Subsidy for Shale Gas Development and Utilization (Ministry of Finance No. 847 [2012]), pursuant to which the central government will subsidize shale gas production companies at a rate of RMB 0.4 per cubic meter of shale gas produced from 2012 to 2015.

China National Energy Administration issued the Shale Gas Industry Policy (NEA No. 5 [2013]) in October, 2013, which classifies shale gas as a "national strategic new industry" and calls for more fiscal support for exploration and development of shale gas. In particular, subsidies should be given directly to a shale gas production company according to the amount of its shale gas development and utilization. Local governments are also encouraged to provide subsidies to shale gas production companies, with the subsidy amount to be determined by local fiscal authorities. The Policy also reduces or waives compensatory fee for mineral resources, license and royalty fees for shale gas production companies. For encouraged projects like shale gas exploration and discovery, the policy also waives customs duty for imported equipment and machineries that cannot be manufactured domestically in accordance with relevant regulations.

In April 2015, to facilitate the development of the shale gas industry, the Ministry of Finance of China and China National Energy Administration issued the Notice on Fiscal Subsidies for Shale Gas Development and Utilization (Ministry of Finance No. 112 [2015]) to further implement the policy of fiscally subsidizing the shale gas industry during the period of the thirteenth "five-year" plan, and the subsidy will be RMB 0.3 per cubic meter of shale gas produced and RMB 0.2 per cubic meter of shale gas produced from 2016 to 2018 and from 2019 to 2020, respectively.

# Price Controls on Crude Oil

According to the Measures for Administration of Petroleum Products Price (for Trial Implementation) issued by NDRC on March 26, 2013, the crude oil price shall be determined by the enterprises on their own accord, by reference to the international market price. The price for supplying crude oil by us and CNPC to each other shall be determined by both the parties upon consultation in accordance with the principle that the cost for transporting domestic crude oil to the refinery is equivalent to the cost for importing crude oil from international market to the refinery. The price for providing crude oil by us and the CNPC to local refineries shall be determined in reference to the supply prices between the two corporations. The price of crude oil produced by CNOOC or other enterprises shall be determined on their own accord by reference to the international market price.

According to the Measures for Administration of Petroleum Products Price issued by NDRC on January 13, 2016, the crude oil price shall be determined by the enterprises on their own accord, by reference to the international market price.

#### Price Controls on Natural Gas

In recent years, the pace of market-oriented natural gas price reforms has accelerated significantly. In April 2015, according to the change in the price of alternative energy, NDRC has reduced the price of non-residential incremental natural gas by RMB 0.44 per cubic meter, increased the price of stock natural gas by RMB 0.04 per cubic meter, and unified the stock natural gas and incremental natural gas prices. In November 2015, pursuant to the general guideline of furthering the price reform of resource products, NDRC released the Circular on Adjustment of the City-Gate Price of Non-Residential Stock Natural Gas (NDRC Pricing Circular 2688[2015]) to further liberalize the pricing of natural gas by replacing the reference ceiling price for city-gate prices of non-residential stock natural gas with a reference base rate. Starting from November 2016, suppliers and buyers may determine through negotiations the specific prices, subject to the cap of 120% of the reference base rate. In October 2016, NDRC has gradually relaxed the control over service prices for gas prices used for fertilizer production, determined that the relevant prices of gas storage facilities were market-oriented, and launched a trial reform of the marketization of city-gate prices in Fujian Province. The city-gate prices for the supply of natural gas in Fujian Province were determined by the supplying and demanding parties through consultation, which further promoted the market-oriented reform of natural gas prices.

In August 2017, based on the results of the supervision and review of the pricing of natural gas pipelines, NDRC adjusted the pipeline transportation prices, and issued the Notice on Reducing the Non-Residential Natural Gas Reference City-Gate Price (NDRC Pricing Circular 1582[2017]) in conjunction with the adjustment of the natural gas value-added tax rate. Since September 1, 2017, the non-residential natural gas reference city-gate prices have been reduced by RMB 0.1 per cubic meter. NDRC encouraged the natural gas production and operation enterprises and users to actively enter the natural gas trading platform, and the prices of natural gas that have been openly traded on trading platforms such as the Shanghai Oil and Gas Exchange Center and Chongqing Oil and Gas Exchange Center are formed by the market. The marketization of domestic natural gas prices is further enhanced.

#### Regulation of Pipelines Networks

In October 2016, NDRC issued the Interim Provisions for Management Measures of Natural Gas Pipeline Transmission Prices and the Interim Provisions for Supervision and Review of Natural Gas Pipeline Transmission Cost (NDRC Pricing Circular 2142[2016]).

In August 2017, according to the Interim Provisions for Management Measures of Natural Gas Pipeline Transmission Prices and the Interim Provisions for Supervision and Review of Natural Gas Pipeline Transmission Cost, after the supervision and review of the pricing of natural gas interprovincial pipelines, NDRC issued the Notice on Ratifying the Natural Gas Pipeline Transmission Prices (NDRC Pricing Circular 1581[2017]) to adjust the prices of natural gas interprovincial pipelines. Since September 1, 2017, based on the pipeline transmission prices (traffic price rate) of the Sichuan-East Gas Pipeline and Yulin-Jinan Pipeline published by the NDRC, along the transportation distance of the natural gas inlet and export, we have calculated and determined the prices of the gas transmission points for Sichuan-East Gas Pipeline and the Yulin-Jinan Pipeline and published the list of prices on our official

#### Regulation of Refining and Marketing of Refined Oil Products

Gasoline and Diesel Prices

Gasoline and diesel prices are government-guided.

In March 2013, NDRC released Circular on Establishment of Sound Price Formation Mechanism of Refined Oil Products (NDRC Pricing Circular 624[2013]), which specified that a reformed refined oil product price formation mechanism shall include: shortening of the refined oil product price adjustment period to 10 working days; elimination of the 4% price fluctuation on international market as a prerequisite for price adjustment; adjustment of the composition of benchmarked crude oil as a reference for domestic oil product prices. To save social resources, if the assessed adjustment in domestic refined oil product prices is less than RMB 50 per tonne, the adjustment will be postponed to next period. In cases of special conditions such as significant increase in domestic CPI, significant emergencies or significant fluctuations of crude oil price on international market which may trigger adjustment of domestic refined oil price, NDRC may implement ad hoc suspension, delay or narrowing of price adjustment upon the approval by the State Council. Upon elimination of the special conditions, the price formation mechanism may resume operation after NDRC obtains the State Council's for approval.

On September 16, 2013, a Circular of Relevant Opinions on Pricing Policies for Upgrading Oil Product Quality (NDRC Pricing Circular 1845[2013]) was promulgated by NDRC. The Circular provides that the prices of gasoline and diesel products shall be increased if the quality of such products is upgraded. For standard gasoline and diesel products that are upgraded to GB IV standards, their prices shall be raised by RMB 290 per tonne and RMB 370 per tonne, respectively; for gasoline and diesel products that are upgraded from GB IV to GB V standards, their price shall be raised by RMB 170 per tonne and RMB 160 per tonne, respectively. Prices for regular diesel shall be benchmarked against automobile diesel with same specification.

On January 13, 2016, NDRC made further adjustments to the pricing mechanism for refined oil products, effective immediately. When benchmark crude oil price falls below US\$ 40/bbl, NDRC will not further adjust oil product prices, the unadjusted portion would be transferred into a risk fund, which can be used for energy conservation and emission reduction, refined oil product quality upgrading and security of and gas supply upon approval by relevant departments.

Jet Fuels Price

During the transition period, the ex-factory price of the jet fuels (standard) will temporarily be determined by the buyers and the sellers, subject to a limit of no more than the CIF post-duty price in the Singapore market.

### Regulation of Crude Oil and Refined Oil Products Market

On December 4, 2006, Ministry of Commerce of the PRC promulgated the "Administrative Rules for Crude Oil Market" and "Administrative Rules for Refined Oil Products Market" to open the wholesale market of crude oil and refined oil products to new market entrants, respectively.

The Notice of the National Energy Administration on Issuing the Measures for the Supervision and Administration of Fair Opening of Oil and Gas Pipelines Network Facilities (for Trial Implementation) (NEA No. 84 [2014]) requires that (i) oil and gas pipelines network facilities operating enterprises, in case of spare capacity of oil and gas pipelines network facilities, shall equally provide their pipeline network facilities to main third-party market players and provide transportation, storage, gasification, liquefaction, compression, and other services; (ii) the transportation (storage, gasification, etc.) prices determined by the pricing authorities in accordance with the relevant administrative provisions shall be implemented for the opening of oil and gas pipelines network facilities; (iii) oil and gas pipelines network facilities operating enterprises shall disclose the access standards, transportation (storage and gasification) prices, conditions for application for access, acceptance procedures, and other information on oil and gas pipelines network facilities on the websites or the information platforms designated by the National Energy Administration on a quarterly basis; and (iv) oil and gas pipeline network facilities operating enterprises shall submit the relevant status of oil and gas pipelines network facilities to the National Energy Administration or its dispatched offices semiannually.

#### Investment

Overseas investments by Chinese enterprises (other than financial enterprises) involving sensitive countries or regions or sensitive industries shall be submitted to MOFCOM for approval, and other overseas investments by Chinese enterprises will only need to submit a filing with MOFCOM or its regional branches.

On June 28, 2017, NDRC and MOFCOM jointly issued the Catalogue of Industries for Guiding Foreign Investment (Revision 2017), which came into force on July 28, 2017. The catalogue further reduces the restrictive measures for foreign investment, promotes the substantial relaxation of foreign investment access, and enhances the level of opening of industries of services, manufacturing and mining. It also explicitly presents a negative list for foreign investment access.

According to the Measures for Supervision and Administration of Overseas Investment by Central Enterprises (SASAC Decree No. 35[2017]) promulgated by the State-owned Assets Supervision and Administration Commission of the State Council, central enterprises shall establish a negative list for overseas investment. The foreign investment projects listed in the special supervision category of the negative list shall be submitted to the SASAC for approval.

In accordance with the Administrative Measures for Overseas Investments (MOFCOM Order No. 3[2014]) issued by MOFCOM, overseas investments involving sensitive countries (regions) and sensitive shall be approved by MOFCOM. All other investments swill require only a filing with MOFCOM.

Under the State Council's Decision on Investment System Reform (State Council No.20[2004]), investments without the use of government funds are only subject to a licensing system or a registration system, as the case may be. Under the current system, only significant projects and the projects of restrictive nature are subject to approval so as to maintain social and public interests, and all other projects of any investment scale are only subject to a registration system.

Taxation, Fees and Royalty

Companies which operate petroleum and petrochemical businesses in China are subject to a variety of taxes, fees and royalties.

Effective from December 1, 2014, the rate of mineral resource compensation charges on crude oil and natural gas is reduced to zero, and the applicable resource tax rate is correspondingly increased from 5% to 6%.

Effective from January 1, 2015, the threshold of the special oil income levy is increased from US\$55 to 65 per barrel, and a five-level progressive rate is applied to special oil income levy collection based on the sale prices.

From November 29, 2014 to January 12, 2015, the unit tax amount of consumption tax on gasoline, naphtha, solvent and lubricant have been adjusted three times and the current applicable consumption tax rates are set forth in the table below. For further information about consumption tax rates, see Note 6 to our consolidated financial statements.

Effective from May 1, 2016, business tax has been completed replaced by value-added tax to cover all the business sectors that used to fall under the business tax regime.

In April 2017, the State Council issued a notice to implement the reform of the existing mineral resources income levy system, in which the existing license fees of exploration rights and production rights will be integrated into mining rights occupancy fees, and will be dynamically adjusted based on the changes in mineral product prices and economic development needs. Collection methods and standards have not yet been released.

Applicable tax, fees and royalties on refined oil products and other refined oil products generally payable by us or by other companies in similar industries are shown below.

| Tax Item  | Tax Base  | Tax Rate/Fee Rate  |  |  |
|---|---|--|--|--|
| Enterprise income tax                             | Taxable income  | 25% effective from January 1, 2008.  |  |  |
| Value-added tax                                   | Revenue   | 11% for liquefied petroleum gas, natural gas, and low density polyethylene for production of agricultural film and fertilizers and 17% for other items. 6%, 11% and 17% for taxable services. We generally charge value-added tax to our customers at the time of settlement on top of the selling prices of our products on behalf of the taxation authority. We may directly claim refund from the value-added tax collected from our customers for value-added tax that we paid for (i) purchasing materials consumed during the production process; and (ii) charges paid for drilling and other engineering services. |  |  |
| Consumption tax                                   | Aggregate volume sold or self-<br>consumed  | Effective from January 13, 2015, RMB 1.52 per liter for gasoline, naphtha, solvent and lubricant, and RMB 1.2 per liter for diesel, fuel oil and jet kerosene.   |  |  |
| Import tariff                                     | CIF China price   | 5% for gasoline, 6% for diesel, 9% for jet kerosene and 6% for fuel oil. In 2017, the applicable tax rate for motor gasoline and aviation gasoline, No. 5-7 fuel oil and diesel is 1% and 0% for jet kerosene and naphtha.   |  |  |
| Resource tax                                      | Aggregate volume sold or self-<br>consumed  | Effective from December 1, 2014, for domestic production of crude oil and natural gas, the applicable tax rate is increased from 5% to 6% of the sales revenue, exemption or deduction may apply if qualified.   |  |  |
| Resource compensation tax                         | Sales revenue of crude oil and natural gas  | Effective from December 1, 2014, the applicable tax rate is reduced from 1% to zero.   |  |  |
| Exploration license fee                           | Area  | RMB 100 to RMB 500 per square kilometer per annum.   |  |  |
| Production license fee                            | Area  | RMB 1,000 per square kilometer per annum.  |  |  |
| Royalty fee <sup>(1)</sup>                        | Production volume   | Progressive rate of 0-12.5% for crude oil and 0-3% for natural gas.  |  |  |
| City construction tax                             | Total payment of value-added tax, consumption tax and business tax  | 1%, 5% and 7%.   |  |  |
| Education surcharge and local education surcharge | Total payment of value-added tax, consumption tax and business tax  | 3% for education surcharge and 2% for local education surcharge.   |  |  |
| Special Oil Income Levy                           | Any revenue derived from sale of domestically produced crude oil when the realized crude oil price exceeds US\$65 per barrel. | Progressive rate of 20% to 40% for revenues derived from crude oil with realized price in excess of US\$65 per barrel.   |  |  |

<sup>(1)</sup> Sino-foreign oil and gas exploration and development cooperative projects whose contracts were signed prior to November 1, 2011 and have not yet expired are still subject to royalty fee, and the project companies of those cooperative projects are not subject to any other resource taxes or fees. Sino-foreign oil and gas exploration cooperative projects whose contracts are signed after November 1, 2011 are not subject to royalty fee, but are subject to resource taxes.

### C. ORGANIZATIONAL STRUCTURE

For a description of our relationship with Sinopec Group Company, see "Item 4. Information on the Company — A. History and Development of the Company" and "Item 7. Major Shareholders and Related Party Transactions." For a description of our significant subsidiaries, see Note 35 to our consolidated financial statements.

#### D. PROPERTY, PLANT AND EQUIPMENT

We own substantially all of our properties, plants and equipment relating to our business activities. See "Item 4. Information on the Company — B. Business Overview" for description of our property, plant and equipment.

#### **Environmental Matters**

We are subject to various national environmental laws and regulations and also environmental regulations promulgated by the local governments in those jurisdictions we have operations, and we must pay the environmental tax for pollutant emissions. Usually the environmental tax increases for each incremental amount of discharge up to a certain level. Above a certain level prescribed by the pollutant discharge permits or other standards, the PRC regulations permit the local government to order any of our facilities to cure certain behavior causing environmental damage and subject to the central government's approval, the local government may also issue orders to close any of our facilities that fail to comply with the existing regulations. In addition, we have incurred capital expenditure specifically in compliance with the various environmental protection objectives set by the PRC government for the petroleum and chemical industry, to promote energy saving and environmental protection.

Our Energy Management and Environmental Protection Department is responsible for environmental management functions such as energy saving, emission reduction, environmental protection, water saving, comprehensive utilization of resources and clean production. Each of our production subsidiaries has implemented policies to control its pollutant emissions and discharge and to oversee compliance with the PRC environmental regulations.

Most of our production facilities have their own environmental protection facilities, and the rest of our production facilities utilize available social resources, to guarantee the effective treatment of waste water, solid waste and waste gases, to ensure the compliance with applicable emission standard for our emission of waste water and waste gas, and to follow applicable disposal procedures for our disposal of solid waste.

Environmental regulations also require companies to file an environmental impact report to the Ministry of Ecology and Environment or local environment department for approval before undertaking any project with negative impact on the environment. The construction of such projects shall comply with any environmental protection measures required by the environmental bureau. After the completion of the construction, the projects shall be assessed according to the relevant requirements of environmental assessment, and the projects will only be permitted to operate after the assessment of its discharge treatment facilities, measures and pollutant discharge satisfactory environmental assessment and approval requirements.

We believe our environmental protection systems and facilities are adequate for us to comply with current applicable national and local environmental protection regulations. The PRC government, however, may impose stricter regulations which may require additional expenditure on compliance with environmental regulations.

Our environmental protection expenditures were approximately RMB 5.8 billion in 2015, RMB 6.4 billion in 2016 and RMB 7.9 billion in 2017.

#### Insurance

In respect of our refining, petrochemical production, and marketing and sales operations, we currently maintain with Sinopec Group Company, under the terms of its Safety Production Insurance Fund (SPI Fund), approximately RMB 817.1 billion of coverage on our property and plants and approximately RMB 81.8 billion of coverage on our inventory. In 2017, we paid an insurance premium of approximately RMB 2.4 billion to Sinopec Group Company for such coverage.

Transportation vehicles and products in transit are not covered by Sinopec Group Company and we maintain insurance policies for those assets with insurance companies in the PRC.

The insurance coverage under SPI Fund applies to all domestic enterprises controlled by Sinopec Group Company under regulations published by the Ministry of Finance. We believe that, in the event of a major accident, we will be able to recover most of our losses from insurance proceeds paid under the SPI Fund or by insurance companies.

Pursuant to an approval of the Ministry of Finance, Sinopec Group Company entered into an agreement with PICC Property and Casualty Company Limited on January 29, 2002 to purchase a property and casualty policy which would also cover our assets. The policy provides for an annual maximum cumulative claim amount of RMB 4.0 billion and a maximum of RMB 2.36 billion per occurrence.

#### ITEM 4A. UNRESOLVED STAFF COMMENTS

None

#### ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

#### A. GENERAL

The following discussion and analysis should be read in conjunction with our audited consolidated financial statements. Our consolidated financial statements have been prepared in accordance with IFRS. Certain financial information presented in this section is derived from our audited consolidated financial statements. Unless otherwise indicated, all financial data presented on a consolidated basis or by segment, are presented net of inter-segment transactions (i.e., inter-segment and other intercompany transactions have been eliminated).

# **Critical Accounting Policies**

Our reported consolidated financial condition and consolidated results of operations are sensitive to accounting methods, assumptions and estimates that underlie the preparation of our financial statements. We base our assumptions and estimates on historical experience and on various other assumptions that we believe to be reasonable and which form the basis for making judgments about matters that are not readily apparent from other sources. On an on-going basis, our management evaluates its estimates. Actual results may differ from those estimates as facts, circumstances and conditions change.

The selection of critical accounting policies, the judgments and other uncertainties affecting application of those policies and the sensitivity of reported results to changes in conditions and assumptions are factors to be considered when reviewing our financial statements. Our principal accounting policies are set forth in Note 2 to the consolidated financial statements. We believe the following critical accounting policies involve the most significant judgments and estimates used in the preparation of our financial statements.

### Oil and gas properties and reserves

The accounting for our upstream oil and gas activities is subject to special accounting rules that are unique to the oil and gas business. There are two methods to account for oil and gas business activities, the successful efforts method and the full cost method. We have elected to use the successful efforts method.

The successful efforts method reflects the volatility that is inherent in exploring for mineral resources in that costs of unsuccessful exploratory efforts are charged to expense as they are incurred. These costs primarily include dry hole costs, seismic costs and other exploratory costs.

Engineering estimates of our oil and gas reserves are inherently imprecise and represent only approximate amounts because of the subjective judgments involved in developing such information. There are authoritative guidelines regarding the engineering criteria that have to be met before estimated oil and gas reserves can be designated as "proved". Proved and proved developed reserves estimates are updated at least annually and take into account recent production and technical information about each field. In addition, as prices and cost levels change from year to year, the estimate of proved and proved developed reserves also changes. If the estimated proved reserves is adjusted downward, the change in depreciation expense or write-down of book value of oil and gas properties will have impact on our profit. This change is considered a change in estimate for accounting purposes and is reflected on a prospective basis in related depletion rates.

Future dismantlement costs for oil and gas properties are estimated with reference to engineering estimates after taking into consideration the anticipated method of dismantlement required in accordance with industry practices in similar geographic area, including estimation of economic life of oil and gas properties, technology and price level. The present values of these estimated future dismantlement costs are capitalized as oil and gas properties with equivalent amounts recognized as provision for dismantlement costs.

Despite the inherent imprecision in these engineering estimates, these estimates are used in determining depreciation expense, impairment expense and future dismantlement costs, and in disclosing the supplemental standardized measure of discounted future net cash flows relating to proved oil and gas properties. Depletion rates are determined based on estimated proved developed oil and gas reserve quantities (the denominator) and oil and gas production volume within reporting period (the numerator). Therefore, assuming all other variables are held constant, an increase in estimated proved developed reserves decreases our depreciation, depletion and amortization expense. Also, estimated reserves are often used to calculate future cash flows from our oil and gas operations, which serve as an indicator of fair value in determining whether a property is impaired or not.

#### Impairment for long-lived assets

If circumstances indicate that the net book value of a long-lived asset, including oil and gas properties, may not be recoverable, the asset may be considered "impaired", and an impairment loss may be recognized. The carrying amounts of long-lived assets are reviewed periodically in order to assess whether the recoverable amounts have declined below the carrying amounts. For goodwill, the recoverable amount is estimated annually. These assets are tested for impairment whenever events or changes in circumstances indicate that their recorded carrying amounts may not be recoverable. When such a decline has occurred, the carrying amount is reduced to recoverable amount. The recoverable amount is the greater of the net selling price and the value in use. It is difficult to precisely estimate selling price because quoted market prices for our assets or cash-generating units are not readily available. In determining the value in use, expected cash flows generated by the asset or the cash-generating unit are discounted to their present value, which requires significant judgment relating to level of sales volume, selling price, amount of operating costs and discount rate. We use all readily available information in determining an amount that is a reasonable approximation of recoverable amount, including estimates based on reasonable and supportable assumptions and projections of reserve quantities, sales volume, selling price, amount of operating costs and discount rate.

Impairment losses recognized for each of the three years ended December 31, 2015, 2016 and 2017 in our statement of income on long-lived assets are summarized as follows:

|                            | Year ended December 31, |                   |         |  |
|----------------------------|-------------------------|-------------------|---------|--|
|                            | 2015                    | 2015 2016         |         |  |
|                            |                         | (RMB in millions) |         |  |
| Exploration and production | 4,864                   | 11,605*           | 13,556* |  |
| Refining                   | 9                       | 1,655             | 1,894   |  |
| Marketing and distribution | 19                      | 267               | 675     |  |
| Chemicals                  | 142                     | 2,898             | 4,922   |  |
| Corporate and others       | 112                     |                   | 211     |  |
| Total                      | 5,146                   | 16,425            | 21,258  |  |

<sup>\*</sup> Information relating to the detailed analysis of the change in impairment losses is presented in Note 7 to the consolidated financial statements.

# Depreciation

Property, plant and equipment (other than oil and gas properties) are depreciated on a straight-line basis over the estimated useful lives of the assets, after taking into account the estimated residual value. We review the estimated useful lives of the assets regularly in order to determine the amount of depreciation expense to be recorded during any reporting period. The useful lives are based on our historical experience with similar assets and take into account anticipated technological changes. The depreciation expense for future periods is adjusted if there are significant changes from previous estimates. There have been no significant changes to the estimated useful lives and residual values during each of the three years ended December 31, 2015, 2016 and 2017.

### Impairment of accounts receivable for bad and doubtful debts

We estimate impairment of accounts receivable for bad and doubtful debts resulting from the inability of our customers to make the required payments. We base our estimates on the aging of our accounts receivable balance, customer credit-worthiness, and historical write-off experience. If the financial condition of our customers were to deteriorate, actual write-offs would be higher than estimated. The changes in the impairment losses for bad and doubtful accounts are as follows:

|  | Year ended December 31, |                   |          |  |
|--|-------------------------|-------------------|----------|--|
|  | 2015                    | 2016              | 2017     |  |
|  |                         | (RMB in millions) | <u> </u> |  |
| Balance as of January 1                    | 530                     | 525               | 683      |  |
| Impairment losses recognized for the year. | 40                      | 238               | 49       |  |
| Reversal of impairment losses              | (13)                    | (8)               | (100)    |  |
| Written off                                | (38)                    | (72)              | (21)     |  |
| Others                                     | 6                       |                   | 1        |  |
| Balance as of December 31                  | 525                     | 683               | 612      |  |

### Allowance for diminution in value of inventories

If the costs of inventories become higher than their net realizable values, an allowance for diminution in value of inventories is recognized. Net realizable value represents the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to make the sale. We base the estimates on all available information, including the current market prices of the finished goods and raw materials, and historical operating costs. If the actual selling prices were to be lower or the costs of completion were to be higher than estimated, the actual allowance for diminution in value of inventories could be higher than estimated. Allowance for diminution in value of inventories is analyzed as follows:

|                                   | Ye      | Year ended December 31, |       |  |  |
|-----------------------------------|---------|-------------------------|-------|--|--|
|                                   | 2015    | 2016                    | 2017  |  |  |
|                                   |         | (RMB in millions)       |       |  |  |
| Balance as of January 1           | 3,603   | 4,402                   | 920   |  |  |
| Allowance for the year            | 3,687   | 430                     | 436   |  |  |
| Reversal of allowance on disposal | (34)    | (10)                    | (13)  |  |  |
| Written off                       | (2,931) | (4,021)                 | (190) |  |  |
| Others                            | 77      | 119                     | 2     |  |  |
| Balance as of December 31         | 4,402   | 920                     | 1,155 |  |  |

#### **Recently Pronounced International Financial Reporting Standards**

Information relating to the recently pronounced IFRS is presented in Note 1 to the consolidated financial statements.

### **Overview of Our Operations**

We are the largest integrated petroleum and petrochemical company in China and one of the largest in Asia in terms of operating revenues. We engage in exploring for, developing and producing crude oil and natural gas, operating refineries and petrochemical facilities and marketing crude oil, natural gas, refined oil products and petrochemical products. We have reported our consolidated financial results according to the following four principal business segments and the corporate and others segment.

• Exploration and Production Segment, which consists of our activities related to exploring for and developing, producing and selling crude oil and natural gas;

- Refining Segment, which consists of purchasing crude oil from our exploration and production segment and from third parties, processing of crude oil into refined oil products, selling refined oil products principally to our marketing and distribution segment;
- *Marketing and Distribution Segment*, which consists of purchasing refined oil products from our refining segment and third parties, and marketing, selling and distributing refined oil products by wholesale to large customers and independent distributors and retail through our retail network;
- *Chemicals Segment*, which consists of purchasing chemical feedstock principally from the refining segment and producing, marketing, selling and distributing chemical products; and
- Corporate and Others Segment, which consists principally of trading activities of the import and export subsidiaries and our research and development activities.

### B. CONSOLIDATED RESULTS OF OPERATIONS

# Year Ended December 31, 2017 Compared with Year Ended December 31, 2016

In 2017, our total operating revenues were RMB 2,360.2 billion, representing an increase of 22.2% over 2016. Our operating income was RMB 86.7 billion, representing an increase of 8.2% over 2016.

The following table sets forth major revenue and expense items in the consolidated statement of income for the years ended December 31, 2016 and 2017.

|  | Year Ended December 31, |             |                          |  |
|--|-------------------------|-------------|--------------------------|--|
|  | 2016                    | 2017        | Change from 2016 to 2017 |  |
|  | (RMB in millions)       |             | (%)                      |  |
| Operating revenues   | 1,930,911               | 2,360,193   | 22.2                     |  |
| Sales of goods   | 1,880,190               | 2,300,470   | 22.4                     |  |
| Other operating revenues   | 50,721                  | 59,723      | 17.7                     |  |
| Operating expenses   | (1,853,718)             | (2,288,723) | 23.5                     |  |
| Purchased crude oil, products and operating supplies and expenses            | (1,379,691)             | (1,770,651) | 28.3                     |  |
| Selling, general and administrative expenses                                 | (64,360)                | (64,973)    | 1.0                      |  |
| Depreciation, depletion and amortization                                     | (108,425)               | (115,310)   | 6.4                      |  |
| Exploration expenses, including dry holes                                    | (11,035)                | (11,089)    | 0.5                      |  |
| Personnel expenses   | (63,887)                | (74,854)    | 17.2                     |  |
| Taxes other than income tax  | (232,006)               | (235,292)   | 1.4                      |  |
| Other operating (expenses)/income, net                                       | 5,686                   | (16,554)    | _                        |  |
| Operating income   | 77,193                  | 71,470      | (7.4)                    |  |
| Net finance costs  | (6,611)                 | (1,560)     | (76.4)                   |  |
| Investment income and share of profits less losses from associates and joint |                         |             |                          |  |
| ventures   | 9,569                   | 16,787      | 75.4                     |  |
| Earnings before income tax   | 80,151                  | 86,697      | 8.2                      |  |
| Tax expense  | (20,707)                | (16,279)    | (21.4)                   |  |
| Net income   | 59,444                  | 70,418      | 18.5                     |  |
| Attributable to:   |                         |             |                          |  |
| Owners of the Company  | 46,672                  | 51,244      | 9.8                      |  |
| Non-controlling interests  | 12,772                  | 19,174      | 50.1                     |  |

#### **Operating revenues**

In 2017, our sales of goods were RMB 2,300.5 billion, representing a increase of 22.4% over 2016. This was mainly attributable to our expanded market by taking opportunities along with oil price's gradually rising, and the increase of prices and sales volume of main crude oil and petrochemical products in 2017.

The following table sets forth our external sales volume, average realized prices and the respective rates of change from 2016 to 2017 for our major products:

|                                   | Sales Volume |        | Change from  | Average Realize | Change from |              |
|-----------------------------------|--------------|--------|--------------|-----------------|-------------|--------------|
|                                   | 2016         | 2017   | 2016 to 2017 | 2016            | 2017        | 2016 to 2017 |
|                                   | (thousand to | nnes)  | (%)          | (RMB per to     | onne)       | (%)          |
| Crude oil                         | 6,808        | 6,567  | (3.5)        | 1,628           | 2,390       | 46.8         |
| Natural gas                       | 19,008(1)    | 22,529 | 18.5         | 1,258(2)        | 1,290       | 2.5          |
| Gasoline                          | 77,480       | 83,933 | 8.3          | 6,386           | 6,941       | 8.7          |
| Diesel                            | 91,492       | 88,848 | (2.9)        | 4,482           | 5,038       | 12.4         |
| Kerosene                          | 25,164       | 25,557 | 1.6          | 2,807           | 3,531       | 25.8         |
| Basic chemical feedstock          | 32,248       | 35,964 | 11.5         | 4,054           | 4,855       | 19.8         |
| Monomer and polymer for synthetic |              |        |              |                 |             |              |
| fiber                             | 7,146        | 10,267 | 43.7         | 5,325           | 6,038       | 13.4         |
| Synthetic resin                   | 12,223       | 13,199 | 8.0          | 7,488           | 8,155       | 8.9          |
| Synthetic fiber                   | 1,369        | 1,304  | (4.7)        | 7,113           | 8,556       | 20.3         |
| Synthetic rubber                  | 1,098        | 1,128  | 2.7          | 9,608           | 11,913      | 24.0         |
| Chemical Fertilizer               | 714          | 698    | (2.2)        | 1,612           | 2,010       | 24.7         |

<sup>(1)</sup> million cubic meters

### (2) RMB per thousand cubic meters

# Sales of crude oil and natural gas

Most of crude oil and a portion of natural gas we produced were used internally for refining and chemical production and the remaining were sold to external customers. In 2017, the total revenue from crude oil, natural gas and other upstream products that were sold externally amounted to RMB 69.2 billion, representing an increase of 45.8% over 2016. The change was mainly due to price increase of crude oil and sales volume increase of natural gas in 2017.

#### Sales of refined petroleum products

In 2017, our refining segment and marketing and distribution segment sell petroleum products (mainly consisting of gasoline, diesel and kerosene which are referred to as the refined oil products and other refined petroleum products) to external parties. The external sales revenue realized by these two segments were RMB 1,324.4 billion, accounting for 56.1% of our operating revenues and representing an increase of 17.2% over 2016. The increase was mainly because of the increase in prices of various refined petrochemical products. The sales revenue of gasoline, diesel and kerosene was RMB 1,120.4 billion, accounting for 84.6% of the total revenue of other refined petroleum products and representing an increase of 14.8% over 2016. The sales revenue of other refined petroleum products was RMB 204.0 billion, accounting for 15.4% of the total revenue of petroleum products and representing an increase of 31.8% over 2016.

# Sales of chemical products

Our external sales revenue of chemical products was RMB 373.8 billion, accounting for 15.8% of our operating revenues and representing an increase of 31.5% over 2016. This was mainly attributable to the increase in prices and sales volume of chemical products.

# Revenue from corporate and others

In 2017, our corporate and others realized sales revenue of RMB 533.1 billion, accounting for 22.6% of our operating revenue and representing an increase of 27.5% over 2016. This was mainly attributable to the price increase of trading crude oil and refined oil.

#### **Operating expenses**

In 2017, our operating expenses were RMB 2,288.7 billion, representing an increase of 23.5% over 2016, which was mainly attributable to the prices increase of crude oil and petrochemical products. Among the operating expenses:

Purchased crude oil, products and operating supplies and expenses were RMB 1,770.7 billion, representing an increase of 28.3% over 2016, accounting for 77.4% of the total operating expenses, of which:

- crude oil purchase expenses were RMB 497.1 billion, representing an increase of 33.0% over 2016. In 2017, the total throughput of crude oil that was purchased externally was 211.03 million tonnes (excluding the amount processed for third parties), representing an increase of 4.3% over 2016; the average unit processing cost for crude oil purchased externally was RMB 2,655 per tonne, representing an increase of 27.4% over 2016;
- refined oil purchase expenses were RMB 300.5 billion, representing an increase of 23.3% over 2016, which was mainly attributable to the prices increase of purchased refined oil along with the price increase of crude oil;
- trade purchase expenses were RMB 503.9 billion, representing an increase of 27.7% over 2016, which was mainly attributable to the price increase of trading crude oil and refined oil; and
- other purchasing expenses were RMB 469.2 billion, representing an increase of 27.6% over 2016. This was mainly due to the price increase of other petroleum related products purchased from external sources along with the price increase of crude oil.

Selling, general and administrative expenses totaled RMB 65.0 billion, representing an increase of 1.0% over 2016.

Depreciation, depletion and amortization was RMB 115.3 billion, representing an increase of RMB 6.9 billion and 6.4% over 2016. This was mainly due to the increase of exploration and production segment by RMB 4.9 billion over 2016.

Exploration expenses, including dry holes were RMB 11.1 billion, representing an increase of 0.5% over 2016.

Personnel expenses were RMB 74.9 billion, representing an increase of 17.2% over 2016. That was mainly because the Company promoted the reform of employment system, transferred some labours into contracted employees, which increased salary and other expenses. To implement the requirement of deepening the reform as required by the Central government, the Company handed over parts of its subsidiaries' social insurance to local government, and paid relevant fees according to the local government's requirements. As the Company improved its profit in 2017, income of employee was increased accordingly in line with its incentive mechanism.

Taxes other than income tax were RMB 235.3 billion, representing an increase of 1.4% over 2016.

Other operating (expenses)/income, net were RMB 16.6 billion, increased by RMB 22.2 billion over the same period of 2016. That was mainly due to the non-operating income from capital injection of Sichuan-to-East China Pipeline Co.

#### **Operating income**

In 2017, our operating income was RMB 71.5 billion, representing a decrease of 7.4% over 2016. Excluding the capital introduction in Sichuan-to-East China gas pipeline in 2016 and the acquisition of Shanghai SECCO in 2017, our operating income in 2017 increased by 19.2% over 2016.

#### Net finance costs

In 2017, our net finance costs were RMB 1.6 billion, representing a decrease of 76.4% over 2016. This decrease in finance costs was mainly attributable to (i) interest expenses decreased by RMB 2.1 billion as a result of the significant decrease of interestbearing debts; (ii) foreign exchange gain of RMB 0.3 billion, increased by RMB 0.9 billion as compared with 2016; (iii) interest income increased by RMB 2.0 billion due to the increase of monetary reserve.

#### Earnings before income tax

In 2017, our earnings before income tax were RMB 86.7 billion, excluding the capital introduction in Sichuan-to-East China gas pipeline in 2016 and the acquisition of Shanghai SECCO in 2017, representing an increase of 38.9% over 2016.

#### Tax expense

In 2017, we recognized income tax expense of RMB 16.3 billion, representing a decrease of 21.4% over 2016. That was mainly due to the increase in exempt investment income.

### Net income attributable to non-controlling interests

In 2017, our net income attributable to non-controlling interests was RMB 19.2 billion, representing an increase of RMB 6.4 billion over 2016.

### Net income attributable to equity shareholders of the Company

In 2017, our net income attributable to our equity shareholders was RMB 51.2 billion, representing an increase of 9.8% over 2016.

### Year Ended December 31, 2016 Compared with Year Ended December 31, 2015

In 2016, our total operating revenues were RMB 1,930.9 billion, representing a decrease of 4.4% over 2015. Our operating income was RMB 77.2 billion, representing an increase of 35.9% over 2015.

The following table sets forth major revenue and expense items in the consolidated statement of income for the years ended December 31, 2015 and 2016.

| <u>-</u>   | Year        | Ended December 31, |                          |
|--|-------------|--------------------|--------------------------|
| _  | 2015        | 2016               | Change from 2015 to 2016 |
|  | (RMB in mil |                    | (%)                      |
| Operating revenues   | 2,020,375   | 1,930,911          | (4.4)                    |
| Sales of goods   | 1,977,877   | 1,880,190          | (4.9)                    |
| Other operating revenues   | 42,498      | 50,721             | 19.3                     |
| Operating expenses   | (1,963,553) | (1,853,718)        | (5.6)                    |
| Purchased crude oil, products and operating supplies and expenses            | (1,494,046) | (1,379,691)        | (7.7)                    |
| Selling, general and administrative expenses                                 | (69,491)    | (64,360)           | (7.4)                    |
| Depreciation, depletion and amortization                                     | (96,460)    | (108,425)          | 12.4                     |
| Exploration expenses, including dry holes                                    | (10,459)    | (11,035)           | 5.5                      |
| Personnel expenses   | (56,619)    | (63,887)           | 12.8                     |
| Taxes other than income tax  | (236,349)   | (232,006)          | (1.8)                    |
| Other operating (expenses)/income, net                                       | (129)       | 5,686              | _                        |
| Operating income   | 56,822      | 77,193             | 35.9                     |
| Net finance costs  | (9,239)     | (6,611)            | (28.4)                   |
| Investment income and share of profits less losses from associates and joint |             |                    | ,                        |
| ventures   | 8,828       | 9,569              | 8.4                      |
| Earnings before income tax   | 56,411      | 80,151             | 42.1                     |
| Tax expense  | (12,613)    | (20,707)           | 64.2                     |
| Net income   | 43,798      | 59,444             | 35.7                     |
| Attributable to:   |             |                    |                          |
| Owner of the Company   | 32,512      | 46,672             | 43.6                     |
| Non-controlling interests  | 11,286      | 12,772             | 13.2                     |
| 42   |             |                    |                          |

#### **Operating revenues**

In 2016, our sales of goods were RMB 1,880.2 billion, representing a decrease of 4.9% over 2015. This was mainly attributable to the price decline of crude oil and petrochemical products.

The following table sets forth our external sales volume, average realized prices and the respective rates of change from 2015 to 2016 for our major products:

|                             | Sales Volume |           | Change from  | Average Realiz | Change from |              |
|-----------------------------|--------------|-----------|--------------|----------------|-------------|--------------|
|                             | 2015         | 2016      | 2015 to 2016 | 2015           | 2016        | 2015 to 2016 |
|                             | (thousand to | nnes)     | (%)          | (RMB per to    | onne)       | (%)          |
| Crude oil                   | 9,674        | 6,808     | (29.6)       | 2,019          | 1,628       | (19.4)       |
| Natural gas                 | 18,440(1)    | 19,008(1) | 3.1          | 1,519(2)       | 1,258(2)    | (17.2)       |
| Gasoline                    | 69,749       | 77,480    | 11.1         | 6,749          | 6,386       | (5.4)        |
| Diesel                      | 95,472       | 91,492    | (4.2)        | 4,937          | 4,482       | (9.2)        |
| Kerosene                    | 23,028       | 25,164    | 9.3          | 3,387          | 2,807       | (17.1)       |
| Basic chemical feedstock    | 29,608       | 32,248    | 8.9          | 4,175          | 4,054       | (2.9)        |
| Synthetic fiber monomer and |              |           |              |                |             |              |
| polymer                     | 6,071        | 7,146     | 17.7         | 5,796          | 5,325       | (8.1)        |
| Synthetic resin             | 11,989       | 12,223    | 2.0          | 7,771          | 7,488       | (3.6)        |
| Synthetic fiber             | 1,380        | 1,369     | (0.8)        | 7,740          | 7,113       | (8.1)        |
| Synthetic rubber            | 1,104        | 1,098     | (0.5)        | 8,778          | 9,608       | 9.5          |
| Chemical fertilizer         | 243          | 714       | 193.8        | 1,823          | 1,612       | (11.6)       |

<sup>(1)</sup> million cubic meters

#### (2) RMB per thousand cubic meters

#### Sales of crude oil and natural gas

Most of crude oil and a portion of natural gas we produced were used internally for refining and chemical production and the remaining were sold to other customers. In 2016, the total revenue from crude oil, natural gas and other upstream products that were sold externally amounted to RMB 47.4 billion, representing a decrease of 17.8% over 2015. The change was mainly due to price and sales volume decline of crude oil in 2016.

#### Sales of refined oil products

In 2016, our refining segment and marketing and distribution segment sell petroleum products (mainly consisting of gasoline, diesel and kerosene which are referred to as the refined oil products and other refined oil products) to external parties. The external sales revenue realized by these two segments were RMB 1,130.4 billion, accounting for 58.5% of our operating revenues and representing a decrease of 6.3% over 2015. The decrease was mainly because of the decline in prices of various refined petrochemical products. The sales revenue of gasoline, diesel and kerosene was RMB 975.6 billion, accounting for 86.3% of the total revenue of other refined petroleum products and representing a decrease of 4.4% over 2015. Sales revenue of other refined oil products was RMB 154.8 billion, accounting for 13.7% of the total revenue of petroleum products and representing a decrease of 17.0% over 2015.

### Sales of chemical products

Our external sales revenue of chemical products was RMB 284.3 billion, accounting for 14.7% of our operating revenues and representing an increase of 2.8% over 2015. This was mainly attributable to the sales volume increase of our chemical products.

#### Revenue from corporate and others

In 2016, our corporate and others realized sales revenue of RMB 418.1 billion, accounting for 21.7% of our operating revenue and representing a decrease of 4.3% over 2015. This was mainly attributable to the price decline of crude oil and petrochemical products.

#### **Operating expenses**

In 2016, our operating expenses were RMB 1,853.7 billion, representing a decrease of 5.6% over 2015, among which:

Purchased crude oil, products and operating supplies and expenses were RMB 1,379.7 billion, representing a decrease of 7.7% over 2015, accounting for 74.4% of the total operating expenses, of which:

- crude oil purchase expenses were RMB 373.7 billion, representing a decrease of 20.4% over 2015. In 2016, the total throughput of crude oil that was purchased externally was 202.40 million tonnes (excluding the amount processed for third parties), representing a decrease of 1.9% over 2015; the average unit processing cost for crude oil purchased externally was RMB 2,084 per tonne, representing a decrease of 19.6% over 2015; and
- other purchasing expenses were RMB 1,006.0 billion, representing a decrease of 1.8% over 2015. This was mainly due to the price decline of feedstock purchased from external sources.

Selling, general and administrative expenses totaled RMB 64.4 billion, representing a decrease of 7.4% over 2015. This was mainly attributable to the reform of our employment system, the transfer of certain labor services to contract employment and continued efforts in cost control.

Depreciation, depletion and amortization was RMB 108.4 billion, representing an increase of 12.4% over 2015. This was mainly due to the decrease of oil and gas reserves and the increase in depreciation and depletion rate as a result of the oil price decline.

Exploration expenses, including dry holes were RMB 11.0 billion, representing an increase of 5.5% over 2015. This was mainly due to our exploration efforts maintained in low oil price environment.

Personnel expenses were RMB 63.9 billion, representing an increase of 12.8% over 2015. This was mainly attributable to the reform of our employment system from 2016.

Taxes other than income tax were RMB 232.0 billion, representing a decrease of 1.8% over 2015. This was mainly attributable to the decrease of consumption tax by RMB 4.9 billion as a result of the decline of diesel production, and the decrease of resources tax by RMB 1.0 billion over the same period of 2015 due to oil price drop.

Other operating income, net were RMB 5.7 billion, compared by a loss of RMB 0.1 billion in 2015 was mainly attributable to the increase of non-operating income as a result of the disposal of Sichuan-to-East China gas pipeline assets as well as the increase of asset impairment.

# **Operating income**

In 2016, our operating income was RMB 77.2 billion, representing an increase of 35.9% over 2015. This was mainly attributable to the utilization of our integration advantage, particularly offsetting the negative impact of low oil price by the profitability of our downstream business.

#### Net finance costs

In 2016, our net finance costs were RMB 6.6 billion, representing a decrease of 28.4% over 2015. This decrease in finance costs was mainly attributable to (i) interest expenses increased by RMB 1.1 billion as a result of replacing US dollar loans with RMB loans (including replacing US dollar loans and compressing risk exposures of US dollar); (ii) foreign exchange loss of RMB 0.6 billion, decreased by RMB 3.2 billion as compared with 2015; (iii) interest income increased by RMB 0.2 billion due to the increase of monetary reserve.

#### **Earnings before income tax**

In 2016, our earnings before income tax were RMB 80.2 billion, representing an increase of 42.1% over 2015.

#### Tax expense

In 2016, we recognized income tax expense of RMB 20.7 billion, representing an increase of 64.2% over 2015. That was mainly due to the substantial increase of profits over the same period of 2015.

#### Net income attributable to non-controlling interests

In 2016, our net income attributable to non-controlling interests was RMB 12.8 billion, representing an increase of RMB 1.5 billion over 2015.

### Net income attributable to equity shareholders of the Company

In 2016, our net income attributable to our equity shareholders was RMB 46.7 billion, representing an increase of 43.6% over 2015.

#### C. DISCUSSIONS ON RESULTS OF SEGMENT OPERATIONS

We divide our operations into four business segments (exploration and production segment, refining segment, marketing and distribution segment and chemicals segment) and corporate and others. Unless otherwise specified, the inter-segment transactions have not been eliminated in the financial data discussed in this section. In addition, the operating revenue data of each segment have included the "other operating revenues" of this segment.

The following table sets forth the operating revenues by each segment, the contribution of external sales and inter-segment sales as a percentage of operating revenues before elimination of inter-segment sales, and the contribution of external sales as a percentage of consolidated operating revenues (i.e. after elimination of inter-segment sales) for the periods indicated.

|                               | Year Ended December 31, |                 |         | As a Percentage of Consolidated Operating Revenues Before Elimination of Inter- segment Sales |       | As a Percentage of<br>Consolidated Operating<br>Revenues After<br>Elimination of Inter- |       |
|-------------------------------|-------------------------|-----------------|---------|---|-------|---|-------|
|                               | 2015                    | 2016            | 2017    | 2016  | 2017  | segment Sales 2016 2017   |       |
|                               |                         | MB in billions) |         | (%)   | (%)   | (%)   | (%)   |
| Exploration and production    | ,                       | ,               |         | ( )   | (1.2) | (,  | (11)  |
| External sales <sup>(1)</sup> | 68                      | 57              | 80      | 1.8   | 2.1   | 3.0   | 3.4   |
| Inter-segment sales           | 71                      | 59              | 78      | 1.9   | 2.0   |   | _     |
| Total operating revenue       | 139                     | 116             | 158     | 3.7   | 4.1   |   |       |
| Refining                      |                         |                 |         |   |       |   |       |
| External sales(1)             | 126                     | 108             | 138     | 3.5   | 3.6   | 5.6   | 5.8   |
| Inter-segment sales           | 801                     | 748             | 874     | 24.2  | 23.0  |   |       |
| Total operating revenue       | 927                     | 856             | 1,012   | 27.7  | 26.6  |   |       |
| Marketing and distribution    |                         |                 |         |   |       |   |       |
| External sales(1)             | 1,103                   | 1,049           | 1,220   | 33.9  | 32.1  | 54.3  | 51.7  |
| Inter-segment sales           | 3                       | 4               | 4       | 0.1   | 0.1   |   |       |
| Total operating revenue       | 1,106                   | 1,053           | 1,224   | 34.0  | 32.2  |   |       |
| Chemicals                     |                         |                 |         |   |       |   |       |
| External sales(1)             | 285                     | 297             | 388     | 9.6   | 10.2  | 15.4  | 16.5  |
| Inter-segment sales           | 43                      | 38              | 50      | 1.2   | 1.3   |   |       |
| Total operating revenue       | 328                     | 335             | 438     | 10.8  | 11.5  |   |       |
| Corporate and others          |                         |                 |         |   |       |   |       |
| External sales(1)             | 438                     | 420             | 534     | 13.5  | 14.0  | 21.7  | 22.6  |
| Inter-segment sales           | 346                     | 320             | 440     | 10.3  | 11.6  |   |       |
| Total operating revenue       | 784                     | 740             | 974     | 23.8  | 25.6  |   |       |
| Total operating               |                         |                 |         | -   |       |   |       |
| revenue before inter-         |                         |                 |         |   |       |   |       |
| segment eliminations          | 3,284                   | 3,100           | 3,806   | 100.0   | 100.0 |   |       |
| Elimination of inter-         |                         |                 |         |   |       |   |       |
| segment sales                 | (1,264)                 | (1,169)         | (1,446) |   |       |   |       |
| Consolidated operating        | 2.020                   | 1.021           | 2.260   |   |       | 100.0   | 100.0 |
| revenues                      | 2,020                   | 1,931           | 2,360   |   |       | 100.0   | 100.0 |

<sup>(1)</sup> include other operating revenues.

The following table sets forth the operating revenues, operating expenses and operating income/(loss) by each segment before elimination of the inter-segment transactions for the periods indicated, and the changes from 2016 to 2017.

|                                     | Ye      | Year Ended December 31, |        |                                 |  |  |
|-------------------------------------|---------|-------------------------|--------|---------------------------------|--|--|
|                                     | 2015    | 2016                    | 2017   | <b>Change from 2016 to 2017</b> |  |  |
| F14i                                |         | (RMB in billions)       |        | (%)                             |  |  |
| Exploration and production          | 120     | 116                     | 1.50   | 25.0                            |  |  |
| Total operating revenues            | 139     | 116                     | 158    | 35.9                            |  |  |
| Total operating expenses            | (156)   | (153)                   | (204)  | 33.3                            |  |  |
| Total operating income/(loss)       | (17)    | (37)                    | (46)   |                                 |  |  |
| Refining                            |         |                         |        |                                 |  |  |
| Total operating revenues            | 927     | 856                     | 1012   | 18.2                            |  |  |
| Total operating expenses            | (906)   | (800)                   | (947)  | 18.4                            |  |  |
| Total operating (loss)/income       | 21      | 56                      | 65     | 15.5                            |  |  |
| Marketing and distribution          |         |                         |        |                                 |  |  |
| Total operating revenues            | 1,106   | 1,053                   | 1,224  | 16.3                            |  |  |
| Total operating expenses            | (1,078) | (1,021)                 | (1193) | 16.8                            |  |  |
| Total operating income/(loss)       | 28      | 32                      | 31     | (1.8)                           |  |  |
| Chemicals                           |         |                         |        |                                 |  |  |
| Total operating revenues            | 328     | 335                     | 438    | 30.6                            |  |  |
| Total operating expenses            | (309)   | (314)                   | (411)  | 30.6                            |  |  |
| Total operating (loss)/income       | 19      | 21                      | 27     | 30.8                            |  |  |
| Corporate and others                |         |                         |        |                                 |  |  |
| Total operating revenues            | 784     | 740                     | 974    | 31.7                            |  |  |
| Total operating expenses            | (784)   | (737)                   | (979)  | 32.9                            |  |  |
| Total operating (loss)/income       | 0       | 3                       | (5)    | _                               |  |  |
| Elimination of inter-segment income | 5       | 2                       | (2)    |                                 |  |  |
|                                     |         |                         |        |                                 |  |  |

### **Exploration and Production Segment**

Most of the crude oil and a small portion of the natural gas produced by the exploration and production segment were used for our refining and chemicals operations. Most of our natural gas and a small portion of crude oil were sold to other customers.

#### Year Ended December 31, 2017 Compared with Year Ended December 31, 2016

In 2017, the operating revenues of this segment were RMB 157.5 billion, representing an increase of 35.9% over 2016. This was mainly attributed to the rise of realized price of crude oil and natural gas as well as expansion of LNG business.

This segment sold 35.31 million tonnes of crude oil and 24.48 billion cubic meters of natural gas in 2017, representing a decrease of 2.9% and an increase of 19.1% over 2016, respectively; 4.82 billion cubic meters of gasified LNG, representing an increase of 118.9% over 2016; and 2.28 million tonnes of LNG, representing an increase of 43.7% over 2016, The average realized price of crude oil and natural gas were RMB 2,341 per tonne and RMB 1,296 per thousand cubic meters, respectively, representing an increase of 35.0% and 2.3%, respectively, over 2016, and the average realized price of gasified LNG and LNG were RMB 1,742 per thousand cubic meters and RMB 3,056 per tonne, respectively, representing an increase of 2.0% and 24.0%, respectively.

In 2017, the operating expenses of this segment were RMB 204 billion, representing an increase of 33.3% over 2016. This was mainly due to:

- Depreciation, depletion and amortization increased by RMB 4.9 billion;
- Impairment of assets increased by RMB 2.0 billion;
- Personnel expenses increased by RMB 1.7 billion;
- Increase of resources tax by RMB 1.0 billion over the same period of 2016 due to price increase of crude oil;
- Increase of purchasing expenses by RMB 15.1 billion as a result of the expansion of LNG business; and
- other income (net) decreased by RMB 20.6 billion, as a result of the restructuring of Sichuan-to-East China Pipeline Co in 2016.

The lifting cost for oil and gas was RMB 788.3 per tonne in 2017, representing a slight increase of 0.3% over 2016.

In 2017, the operating loss of the exploration and production segment were RMB 45.9 billion, representing an increase by RMB 9.3 billion over 2016. Excluding the restructuring of Sichuan-to-East China Pipeline Co., the operating loss of the exploration and production segment decreased by 11.3 billion over 2016.

### Year Ended December 31, 2016 Compared with Year Ended December 31, 2015

In 2016, the operating revenues of this segment were RMB 115.9 billion, representing a decrease of 16.5% over 2015. This was mainly attributable to the decline of price of crude oil and natural gas, and decline of sales volume of crude oil.

This segment sold 36.38 million tonnes of crude oil and 20.56 billion cubic meters of natural gas in 2016, representing a decrease of 13.8% and an increase of 3.7% over 2015, respectively. The average realized price of crude oil and natural gas were RMB 1,734 per tonne and RMB 1,267 per thousand cubic meters, respectively, representing a decrease of 13.9% and 17.5%, respectively, over 2015.

In 2016, the operating expenses of this segment were RMB 152.6 billion, representing a decrease of 2.2% over 2015. This was mainly due to:

- Depreciation, depletion and amortization increased by RMB 9.8 billion, primarily as a result of downward revision of oil and gas reserve due to price decrease;
- Impairment of oil and gas assets increased by RMB 6.7 billion, as a result of downward revision of oil and gas reserve due to price decrease and high operating and development cost for certain oil fields; and
- other expenses (net) decreased by RMB 20.6 billion, as a result of the restructuring of Sichuan-to-East China Pipeline

The lifting cost for oil and gas was RMB 786.0 per tonne in 2016, representing a slight increase of 0.8% despite of the production volume of crude oil decreased by 13.2% over 2015.

In 2016, the segment made every effort to optimize resource mix, attached great emphasis on cash flow contributions, and proactively controlled costs. Due to the drop in crude oil and natural gas prices, the operating loss of the exploration and production segment were RMB 36.6 billion.

#### **Refining Segment**

Business activities of the refining segment consist of purchasing crude oil from third parties and from our exploration and production segment, processing crude oil into refined oil products, selling gasoline, diesel and kerosene to the marketing and distribution segment, selling a portion of chemical feedstock to our chemicals segment, and selling other refined oil products to the domestic and overseas customers.

### Year Ended December 31, 2017 Compared with Year Ended December 31, 2016

In 2017, the operating revenues of this segment were RMB 1,011.9 billion, representing an increase of 18.2% over 2016. This was mainly attributable to the price increase of refined oil products.

The table below sets forth sales volume and average realized prices by product for 2017 and 2016, as well as the percentage changes in sales volume and average realized prices for the periods shown.

|                            | Sales volu   | Sales volume |              | Average realized prices |       | Change from  |  |
|----------------------------|--------------|--------------|--------------|-------------------------|-------|--------------|--|
|                            | 2016         | 2017         | 2016 to 2017 | 2016                    | 2017  | 2016 to 2017 |  |
|                            | (thousand to | onnes)       | (%)          | (RMB per tonne)         |       | (%)          |  |
| Gasoline                   | 52,461       | 54,273       | 3.5          | 5,904                   | 6,538 | 10.7         |  |
| Diesel                     | 58,734       | 60,680       | 3.3          | 4,505                   | 4,962 | 10.1         |  |
| Kerosene                   | 14,529       | 17,080       | 17.6         | 2,814                   | 3,527 | 25.3         |  |
| Chemical feedstock         | 36,408       | 36,951       | 1.5          | 2,584                   | 3,204 | 24.0         |  |
| Other refined oil products | 55 742       | 58 801       | 5.5          | 2 529                   | 2 929 | 15.8         |  |

In 2017, the domestic gasoline and diesel prices were raised 11 times and lowered 6 times. The 90# gasoline price (tax included) was accumulatively increased by RMB 435 per tonne, and the 0# diesel price (tax included) was increased by RMB 420 per tonne cumulatively.

In 2017, our sales revenues of gasoline were RMB 354.8 billion, representing an increase of 14.6% over 2016; the sales revenues of diesel were RMB 301.1 billion, representing an increase of 13.8% over 2016; the sales revenues of kerosene were RMB 60.2 billion, representing an increase of 47.3% over 2016; the sales revenues of chemical feedstock were RMB 118.4 billion, representing an increase of 25.8% over 2016; and the sales revenues of other refined oil products other than gasoline, diesel, kerosene and chemical feedstock were RMB 172.2 billion, representing an increase of 22.2% over 2016.

This segment's operating expenses were RMB 946.8 billion in 2017, representing an increase of 18.4% over 2016, which is mainly attributable to the increase in procurement cost of crude oil.

In 2017, the average processing cost of crude oil was RMB 2,774 per tonne, representing an increase of 26.4% over 2016. Refining throughput were 230.30 million tonnes (excluding the volume processed for third parties), representing an increase of 4.2% over 2016. In 2017, the total costs of crude oil processed were RMB 638.8 billion, representing an increase of 31.8% over 2016.

The refining margin was RMB 510.7 per tonne in 2017, representing an increase of RMB 38.8 per tonne compared with 2016. This is mainly due to the increased proportion of high value added products (volume of gasoline with high octane number and jet fuel increased by 0.7% and 5.6% over 2016 and diesel to gasoline ratio down to 1.17), the promotion of quality upgrading of refined oil products (output of gasoline and diesel with GB V standard or above increased by 58% over 2016), enlarged total refinery throughput by increasing the export volume, and further improved margins for LPG, asphalt and other refined oil products by our centralized marketing advantages brought fully into play.

In 2017, the unit refining cash operating cost (defined as operating expenses less the processing cost of crude oil and refining feedstock, depreciation and amortisation, taxes other than income tax and other operating expenses, then divided by the throughput of crude oil and refining feedstock) was RMB 175.2 per tonne, an increase of RMB 9.5 per tonne over 2016, mainly because of increased operating expenses resulting from newly operated facilities related to quality upgrading of refined oil products as well as safety enhancement and environment protection.

This segment's operating profit of the segment was RMB 65.0 billion in 2017, representing an increase of RMB 8.7 billion or 15.5% as compared with 2016.

### Year Ended December 31, 2016 Compared with Year Ended December 31, 2015

In 2016, the operating revenues of this segment were RMB 855.8 billion, representing a decrease of 7.7% over 2015. This was mainly attributable to the price decline of refined oil products.

The table below sets forth sales volume and average realized prices by product for 2016 and 2015, as well as the percentage changes in sales volume and average realized prices for the periods shown.

|                            | Sales volu   | Sales volume      |              | Average realize     | Change from |              |  |
|----------------------------|--------------|-------------------|--------------|---------------------|-------------|--------------|--|
|                            | 2015         | 2016              | 2015 to 2016 | 2015                | 2016        | 2015 to 2016 |  |
|                            | (thousand to | (thousand tonnes) |              | (%) (RMB per tonne) |             | (%)          |  |
| Gasoline                   | 50,921       | 52,461            | 3.0          | 6,191               | 5,904       | (4.6)        |  |
| Diesel                     | 63,359       | 58,734            | (7.3)        | 4,797               | 4,505       | (6.1)        |  |
| Kerosene                   | 13,518       | 14,529            | 7.5          | 3,420               | 2,814       | (17.7)       |  |
| Chemical feedstock         | 35,945       | 36,408            | 1.3          | 2,984               | 2,584       | (13.4)       |  |
| Other refined oil products | 52,418       | 55,742            | 6.3          | 2,842               | 2,529       | (11.0)       |  |

In 2016, our sales revenues of gasoline were RMB 309.7 billion, representing a decrease of 1.8% over 2015; the sales revenues of diesel were RMB 264.6 billion, representing a decrease of 12.9% over 2015; the sales revenues of kerosene were RMB 40.9 billion, representing a decrease of 11.6% over 2015; the sales revenues of chemical feedstock were RMB 94.1 billion, representing a decrease of 12.3% over 2015; and the sales revenues of other refined oil products other than gasoline, diesel, kerosene and chemical feedstock were RMB 141.0 billion, representing a decrease of 5.4% over 2015.

This segment's operating expenses were RMB 799.5 billion in 2016, representing a decrease of 11.7% over 2015, which is mainly attributable to the decline in procurement cost of crude oil.

In 2016, the average unit cost of refining feedstock processed was RMB 2,194 per tonne, representing a decrease of 18.5% over 2015. Refining throughput were 220.98 million tonnes (excluding the volume processed for third parties), representing a decrease of 1.1% over 2015. In 2016, the total costs of refining feedstock processed were RMB 484.8 billion, representing a decrease of 19.4% over 2015.

The refining margin was RMB 471.9 per tonne in 2016, representing an increase of RMB 153.8 per tonne over 2015. This was mainly attributable to the rebound of international crude oil price, and floor prices policy for refined oil products announced by the PRC government, therefore widened the price spread between raw materials and products

In 2016, the unit refining cash operating cost (defined as operating expenses less the purchase cost of crude oil and refining feedstock, depreciation and amortization, taxes other than income tax and other operating expenses, and divided by the refinery throughput) was RMB 165.7 per tonne, decreased by RMB 1.9 per tonne. This was mainly attributable to strengthening of cost control, improving operating efficiency and reducing costs of fuel, electricity and other auxiliaries facilities.

In 2016, this segment utilized the rebound of oil price, strengthened crude oil procurement management, adjusted structure with market-oriented efforts, increased exports and improved the profitability of self-selling products, and as a result, realized significant increase in operating profit.

This segment's operating income was RMB 56.3 billion in 2016, representing an increase of RMB 35.3 billion as compared with 2015.

### **Marketing and Distribution Segment**

The business activities of the marketing and distribution segment include purchasing refined oil products from our refining segment and third parties, making wholesale and distribution to domestic customers, and retail of the refined oil products through this segment's retail distribution network, as well as providing related services.

#### Year Ended December 31, 2017 Compared with Year Ended December 31, 2016

In 2017, the operating revenues of this segment were RMB 1,224.2 billion, representing an increase of 16.3% compared with 2016.

In 2017, the sales revenues of gasoline, diesel and kerosene were RMB 582.9 billion, RMB 449.2 billion and RMB 90.2 billion, representing an increase of 17.7%, 9.0% and 27.8%, respectively, over 2016.

The following table sets forth the sales volumes, average realized prices and the respective rates of changes of the four major product categories in 2017 and 2016, including breakdown in retail, wholesale and distribution of gasoline and diesel.

|                            | Sales Volume |        | Change from  | Average Realiz | Change from |              |
|----------------------------|--------------|--------|--------------|----------------|-------------|--------------|
|                            | 2016         | 2017   | 2016 to 2017 | 2016           | 2017        | 2016 to 2017 |
|                            | (thousand to | onnes) | (%)          | (RMB per t     | tonne)      | (%)          |
| Gasoline                   | 77,613       | 83,980 | 8.2          | 6,380          | 6,941       | 8.8          |
| Retail sale                | 63,718       | 66,364 | 4.2          | 6,722          | 7,346       | 9.3          |
| Wholesale and distribution | 13,895       | 17,616 | 26.8         | 4,812          | 5,412       | 12.5         |
| Diesel                     | 91,998       | 89,146 | (3.1)        | 4,478          | 5,039       | 12.5         |
| Retail sale                | 46,656       | 44,736 | (4.1)        | 5,088          | 5,588       | 9.8          |
| Wholesale and distribution | 45,342       | 44,410 | (2.1)        | 3,851          | 4,486       | 16.5         |
| Kerosene                   | 25,164       | 25,555 | 1.6          | 2,807          | 3,531       | 25.8         |
| Fuel oil                   | 22,034       | 23,299 | 5.7          | 1,703          | 2,251       | 32.2         |
|                            |              | 5.0    | `            |                |             |              |

In 2017, the operating expenses of the segment were RMB 1,192.6 billion, representing an increase of RMB 171.9 billion or 16.8% as compared with that of 2016. This was mainly due to increased procurement prices of refined oil products and volume of gasoline.

In 2017, the segment's marketing cash operating cost (defined as the operating expenses less purchase costs, taxes other than income tax, depreciation and amortisation, and then divided by the sales volume) was RMB 198.7 per tonne, representing an increase of 0.7% compared with that of 2016.

In 2017, the operating revenues of non-fuel business was RMB 27.6 billion, representing an increase of RMB 6.2 billion compared with 2016; the profit of non-fuel business was RMB 2.2 billion, representing an increase of RMB 0.7 billion compared with 2016.

The operating income of this segment in 2017 was RMB 31.6 billion, representing a decrease of 1.8% compared with 2016.

#### Year Ended December 31, 2016 Compared with Year Ended December 31, 2015

In 2016, the operating revenues of this segment were RMB 1,052.9 billion, representing a decrease of 4.9% compared with 2015.

In 2016, the sales revenues of gasoline, diesel and kerosene were RMB 495.2 billion, RMB 412.0 billion and RMB 70.6 billion, representing an increase of 5.1%, a decrease of 13.0% and a decrease of 9.5%, respectively, over 2015.

The following table sets forth the sales volumes, average realized prices and the respective rates of changes of the four major product categories in 2016 and 2015, including breakdown in retail, wholesale and distribution of gasoline and diesel.

|                            | Sales Volume |        | Change from  | Average Realiz | Change from |              |
|----------------------------|--------------|--------|--------------|----------------|-------------|--------------|
|                            | 2015         | 2016   | 2015 to 2016 | 2015           | 2016        | 2015 to 2016 |
|                            | (thousand to | onnes) | (%)          | (RMB per       | tonne)      | (%)          |
| Gasoline                   | 69,842       | 77,613 | 11.1         | 6,747          | 6,380       | (5.4)        |
| Retail sale                | 58,211       | 63,718 | 9.5          | 6,996          | 6,722       | (3.9)        |
| Wholesale and distribution | 11,631       | 13,895 | 19.5         | 5,498          | 4,812       | (12.5)       |
| Diesel                     | 95,907       | 91,998 | (4.1)        | 4,936          | 4,478       | (9.3)        |
| Retail sale                | 50,756       | 46,656 | (8.1)        | 5,490          | 5,088       | (7.3)        |
| Wholesale and distribution | 45,151       | 45,342 | 0.4          | 4,314          | 3,851       | (10.7)       |
| Kerosene                   | 23,028       | 25,164 | 9.3          | 3,387          | 2,807       | (17.1)       |
| Fuel oil                   | 24,980       | 22,034 | (11.8)       | 2,215          | 1,703       | (23.1)       |

The operating expenses of this segment in 2016 was RMB 1,020.7 billion, representing a decrease of RMB 57.1 billion or 5.3%, over 2015, which was mainly attributable to the decrease of purchase volume and purchase costs of diesel and fuel oil.

In 2016, this segment's unit cash selling expenses of refined oil products per tonne (defined as the operating expenses less the purchasing costs, taxes other than income tax, depreciation and amortization and divided by the sales volume) was RMB 197.3 per tonne, representing an increase of 4.3%.

In 2016, facing abundant domestic supply of refined oil products and strong market competition, the segment made full use of the advantages of our extensive sales network to actively expand the gasoline market, increased sales of high-grade gasoline and expanded the total sales volume, coordinated for more efficient utilization of internal and external resources, which led to improved profit margins and better performance.

The operating income of this segment in 2016 was RMB 32.2 billion, representing an increase of 11.4% over 2015.

### **Chemicals Segment**

The business activities of the chemicals segment include purchasing chemical feedstock from the refining segment and third parties, producing, marketing and distributing petrochemical and inorganic chemical products.

#### Year Ended December 31, 2017 Compared with Year Ended December 31, 2016

The operating revenues of the chemicals segment in 2017 were RMB 437.7 billion, representing an increase of 30.6% over 2016, which was mainly attributable to the increase in sales volume and price of chemical products.

The sales revenues generated by the segment's six major categories of chemical products (namely basic organic chemicals, synthetic resin, synthetic fiber monomer and polymer, synthetic fiber, synthetic rubber, and chemical fertiliser) totaled RMB 413.5 billion, representing an increase of 30.8% as compared with 2016, and accounted for 94.5% of the operating revenues of the segment.

The following table sets forth the sales volume, average realized price and the respective rates of changes for each of these six categories of chemical products of this segment from 2016 to 2017.

|                              | Sales Volume |        | Change from  | Average Realiz | Change from |              |
|------------------------------|--------------|--------|--------------|----------------|-------------|--------------|
|                              | 2016         | 2017   | 2016 to 2017 | 2016           | 2017        | 2016 to 2017 |
|                              | (thousand to | onnes) | (%)          | (RMB per t     | onne)       | (%)          |
| Basic organic chemicals      | 41,605       | 46,351 | 11.4         | 3,963          | 4,684       | 18.2         |
| Synthetic fiber monomers and |              |        |              |                |             |              |
| polymers                     | 7,169        | 10,332 | 44.1         | 5,328          | 6,047       | 13.5         |
| Synthetic resins             | 12,250       | 13,215 | 7.9          | 7,482          | 8,153       | 9.0          |
| Synthetic fiber              | 1,369        | 1,304  | (4.7)        | 7,113          | 8,556       | 20.3         |
| Synthetic rubber             | 1,099        | 1,138  | 3.5          | 9,609          | 11,957      | 24.4         |
| Chemical fertilizer          | 714          | 700    | (2.0)        | 1,612          | 2,008       | 24.6         |

In 2017, the operating expenses of the chemicals segment were RMB 410.8 billion, representing an increase of 30.6% over 2016, mainly because of the significant increase in the price of externally procured raw materials.

In 2017, the segment seized the opportunities of the improving market conditions, coordinated production with sales, intensified structural adjustment, increased the production of synthetic resin, rubber and some organic products which were more profitable, positively expanded the market, strictly controlled costs and expenses, thus, resulting in remarkable profits.

In 2017, the operating income of this segment was RMB 27.0 billion, representing an increase of RMB 6.4 billion or 30.8% as compared with 2016.

### Year Ended December 31, 2016 Compared with Year Ended December 31, 2015

The operating revenues of the chemicals segment in 2016 were RMB 335.1 billion, representing an increase of 1.8% over 2015, which was mainly attributable to the increase in sales volume of chemical products.

The sales revenues of our six major categories of chemical products (namely basic organic chemicals, synthetic resins, synthetic fiber monomers and polymers for synthetic fiber, synthetic fiber, synthetic rubber and chemical fertilizer) of this segment in 2016 were approximately RMB 316.2 billion, representing an increase of 2.1% compared with 2015, accounting for 94.3% of the operating revenues of this segment.

The following table sets forth the sales volume, average realized price and the respective rates of changes for each of these six categories of chemical products of this segment from 2015 to 2016.

|                              | Sales Volume |        | Change from  | Average Realized Prices |       | Change from  |
|------------------------------|--------------|--------|--------------|-------------------------|-------|--------------|
|                              | 2015         | 2016   | 2015 to 2016 | 2015                    | 2016  | 2015 to 2016 |
|                              | (thousand to | onnes) | (%)          | (RMB per t              | onne) | (%)          |
| Basic organic chemicals      | 38,903       | 41,605 | 6.9          | 4,121                   | 3,963 | (3.8)        |
| Synthetic fiber monomers and |              |        |              |                         |       |              |
| polymers                     | 6,083        | 7,169  | 17.9         | 5,797                   | 5,328 | (8.1)        |
| Synthetic resins             | 11,993       | 12,250 | 2.1          | 7,771                   | 7,482 | (3.7)        |
| Synthetic fiber              | 1,380        | 1,369  | (0.8)        | 7,739                   | 7,113 | (8.1)        |
| Synthetic rubber             | 1,107        | 1,099  | (0.7)        | 8,769                   | 9,609 | 9.6          |
| Chemical fertilizer          | 243          | 714    | 193.8        | 1,823                   | 1,612 | (11.6)       |

The operating expenses of this segment in 2016 were RMB 314.5 billion, representing an increase of 1.6% over 2015.

In 2016, the segment seized the favorable opportunities of the low feed stock price, further adjust feed stock and product mix, coordinated production with sales, strictly controlled costs and expenses, thus, resulting in remarkable profits.

In 2016, the operating income of this segment was RMB 20.6 billion, representing an increase of RMB 1.1 billion as compared with 2015.

#### **Corporate and Others**

The business activities of corporate and others mainly consist of the import and export business activities of our subsidiaries, research and development activities of us and managerial activities of our headquarters.

#### Year Ended December 31, 2017 Compared with Year Ended December 31, 2016

In 2017, the operating revenue generated from corporate and others was RMB 974.9 billion, representing increase of 31.8% over 2016, which was mainly attributable to the increase in crude oil trading incomes caused by price increase of crude oil as compared with 2016.

In 2017, the operating expenses of this segment was RMB 979.3 billion, representing an increase of 32.9% over 2016.

In 2017, the operating loss of this segment was RMB 4.48 billion.

#### Year Ended December 31, 2016 Compared with Year Ended December 31, 2015

In 2016, the operating revenue generated from corporate and others was RMB 739.9 billion, among which the sales revenues realized by subsidiaries such as trading companies were RMB 736.2 billion, representing decrease of 5.6% over 2015, which was mainly attributable to the decrease in trading incomes caused by price drop of crude oil as well as lower revenue from crude oil trading business as compared with 2015.

In 2016, the operating expenses of this segment was RMB 736.7 billion, among which operating expenses realized by trading companies subsidiaries were RMB 728.0 billion, representing a decrease of 6.0% over 2015.

In 2016, the operating income of this segment was RMB 3.2 billion, among which the operating income realized by subsidiaries such as trading companies was RMB 8.2 billion.

# D. LIQUIDITY AND CAPITAL RESOURCES

Our primary sources of funding have been cash provided by our operating activities, along with short-term and long-term loans. Our primary uses of cash have been for working capital, capital expenditures and repayment of short-term and long-term loans. We arrange and negotiate financing with financial institutions to finance our capital resource requirement, and maintain a certain level of standby credit facilities to reduce liquidity risk. We believe that our current cash on hand, expected cash flows from operations and available standby credit facilities from financial institutions will be sufficient to meet our working capital requirements and repay our short term debts and obligations when they become due.

The following table sets forth a summary of our consolidated statements of cash flow data for the years ended December 31, 2015, 2016 and 2017.

|  | Yea       | Year Ended December 31, |           |  |  |
|--|-----------|-------------------------|-----------|--|--|
| Statement of cash flow data                            | 2015      | 2016                    | 2017      |  |  |
|  |           | (RMB in millions)       |           |  |  |
| Net cash generated from operating activities           | 165,740   | 214,543                 | 190,935   |  |  |
| Net cash used in investing activities                  | (116,719) | (66,217)                | (145,323) |  |  |
| Net cash generated from/(used in) financing activities | 9,093     | (93,047)                | (56,509)  |  |  |
| Net increase/(decrease) in cash and cash equivalents   | 58,114    | 55,279                  | (10,897)  |  |  |

The net cash generated from our operating activities in 2017 was RMB 190.9 billion, representing a decrease of RMB 23.6 billion over 2016, which was mainly due to the increase in receivables and inventory resulted from the rising oil prices and inventory level

The net cash generated from our operating activities in 2016 was RMB 214.5 billion, representing an increase of RMB 48.8 billion over 2015, which was mainly due to an increase in earnings before income tax by RMB 23.7 billion, optimized fund utilization and improvement on working capital.

The net cash generated from our operating activities in 2015 was RMB 165.7 billion, representing an increase of RMB 17.7 billion over 2014, which was mainly due to an increase in earnings before tax and improvement on working capital.

The net cash used in our investing activities in 2017 was RMB 145.3 billion, representing an increase of RMB 79.1 billion over 2016, which was mainly due to an increase of fixed deposits due over three months and an increase of acquisitions and investments in associates and joint ventures.

The net cash used in our investing activities in 2016 was RMB 66.2 billion, representing a decrease of RMB 50.5 billion over 2015, which was mainly due to the decrease of capital expenditure by RMB 30.0 billion and RMB 13.2 billion received as proceeds from the sale of equity interest in Sinopec Sichuan-to-East China Pipeline Co., Ltd..

The net cash used in our investing activities in 2015 was RMB 116.7 billion, representing a decrease of RMB 15.6 billion over 2014, which was mainly due to the decrease of fixed assets expenditure in the reporting period.

The net cash used in the Company's financing activities in 2017 was RMB 56.5 billion, representing a decrease of cash out flow by RMB 36.5 billion over 2016. This was mainly due to the decrease in borrowing repayment.

The net cash outflow used in our financing activities in 2016 was RMB 93.0 billion, representing a net cash outflow increase of RMB 102.1 billion over 2015, which was mainly due to a cash inflow of RMB 105.0 billion from the capital introduction of Sinopec Marketing Co., Ltd. in 2015 and the significant reduction in interest bearing debts for two consecutive years, of which, the Company repaid RMB 62.6 billion and RMB 63.0 billion in 2015 and 2016, respectively.

The net cash inflow generated from our financing activities in 2015 was RMB 9.1 billion, representing an increase of RMB 30.6 billion over 2014. This reflected: (i) the completion of capital injection to Sinopec Marketing Co.; and (ii) the repayment of high interest bearing debts.

In respect of our cash flow situation of 2017, we further intensified central management of funds, strictly controlled the size of monetary funds and interest bearing debts, reduced capital precipitation, accelerated cash flow to continuously maintain a high level of our operating cash flow.

In respect of our debts and borrowings, due to continuing improvement of our cash flow, we decreased our debts to RMB 179.8 billion at the end of 2017 from RMB 192.3 billion from the beginning of 2017. Our short-term debts, primarily consist of revolving loans borrowed according to our business plan and operation needs and overdrawing agreements entered into on the corporate bank account with our strategic-alliance banks to meet our intra-day payment requirements, increased by RMB 5.8 billion from the beginning of 2017, representing an increase from 38.91% at the beginning of 2017 to 44.86% at the end of 2017 of the debts, which is mainly due to the increase of short-term debts when the direct financing rate is at historically high level to reduce the financing costs. Our long-term debts decreased by RMB 18.3 billion from the beginning of 2017, representing a decrease from 61.09% at the beginning of 2017 to 55.14% at the end of 2017 of the debts, which is due to the recognition of two tranches of our corporate bonds to be matured in 2018 as non-current debt within one year, and signed overdraft account agreements with major strategic and cooperative banks to meet the daily payment needs.

#### **Contractual Obligations and Commercial Commitments**

The following table sets forth our obligations and commitments to make future payments under contracts and commercial commitments as of December 31, 2017.

|  | As of December 31, 2017 |         |                   |           |               |  |
|--|-------------------------|---------|-------------------|-----------|---------------|--|
|  | less than 1             |         |                   |           |               |  |
|  | Total                   | year    | 1-3 years         | 4-5 years | After 5 years |  |
|  |                         |         | (RMB in millions) |           |               |  |
| Contractual obligations <sup>(1)</sup> |                         |         |                   |           |               |  |
| Short-term debt                        | 81,979                  | 81,979  |                   |           |               |  |
| Long-term debt                         | 109,735                 | 2,253   | 38,108            | 52,131    | 17,243        |  |
| Total contractual obligations          | 191,714                 | 84,232  | 38,108            | 52,131    | 17,243        |  |
|  |                         |         |                   |           |               |  |
| Other commercial commitments           |                         |         |                   |           |               |  |
| Operating lease commitments            | 257,122                 | 11,114  | 22,222            | 20,980    | 202,806       |  |
| Capital commitments                    | 178,383                 | 178,383 |                   |           |               |  |
| Exploration and production licenses    | 1,258                   | 205     | 115               | 56        | 882           |  |
| Guarantees <sup>(2)</sup>              | 24,192                  | 24,192  |                   |           |               |  |
| Total commercial commitments           | 460,955                 | 213,894 | 22,337            | 21,036    | 203,688       |  |

<sup>(1)</sup> Contractual obligations include the contractual obligations relating to interest payments.

### Historical and Planned Capital Expenditure

The following table sets forth our capital expenditure by segment for the years of 2015, 2016 and 2017 and the capital expenditure in each segment as a percentage of our total capital expenditure for such year.

|                      | 201    | 5       | 201   | 6                   | 201            | 7       | Tot    | al      |
|----------------------|--------|---------|-------|---------------------|----------------|---------|--------|---------|
|                      | RMB    | Percent | RMB   | Percent             | RMB            | Percent | RMB    | Percent |
|                      |        |         | (in   | billions, except pe | ercentage data | )       |        |         |
| Exploration and      |        |         |       |                     |                |         |        |         |
| production           | 54.71  | 48.67%  | 32.19 | 42.10%              | 31.34          | 31.54%  | 118.24 | 41.02%  |
| Refining             | 15.13  | 13.46%  | 14.35 | 18.77%              | 21.07          | 21.21%  | 50.55  | 17.54%  |
| Marketing and        |        |         |       |                     |                |         |        |         |
| distribution         | 22.12  | 19.68%  | 18.49 | 24.18%              | 21.54          | 21.67%  | 62.15  | 21.56%  |
| Chemicals            | 17.63  | 15.68%  | 8.85  | 11.58%              | 23.03          | 23.17%  | 49.51  | 17.18%  |
| Corporate and others | 2.82   | 2.51%   | 2.58  | 3.37%               | 2.40           | 2.41%   | 7.80   | 2.70%   |
| Capital Expenditure  | 112.41 | 100.00% | 76.46 | 100.00%             | 99.38          | 100.00% | 288.25 | 100.00% |

In 2017, focusing on quality and profitability of investment, we continuously optimized our investment projects. As a result, our capital expenditure amounted to RMB 99.4 billion, among which:

<sup>(2)</sup> Guarantee is not limited by time, therefore specific payment due period is not applicable. As of December 31, 2017, with respect to guarantees in relation to banking facilities granted to certain parties, we have not entered into any off-balance sheet arrangements. As of December 31, 2017, the maximum amount of potential future payments under the guarantees was RMB 24.2 billion. As of December 31, 2016, the maximum amount of potential future payments under the guarantees was RMB 22.9 billion. See Note 30 to the consolidated financial statements for further information of the guarantees.

- Exploration and production. RMB 31.3 billion was mainly for Fuling shale gas and Hangjinqi natural gas field development projects, Shengli and Northwest crude development projects, LNG terminals in Tianjin, Wen-23 gas storage and phase I of Xinjiang gas pipeline, as well as overseas projects.
- Refining. RMB 21.1 billion was mainly for Zhongke Refining and Petrochemical project, adjustments in the product mix of Zhenhai and Maoming refineries, and gasoline and diesel GB VI quality upgrading projects.
- *Marketing and distribution*. RMB 21.5 billion was mainly for construction of service stations and refined oil product pipelines, depots and storage facilities.
- *Chemicals*. RMB 23.0 billion was mainly for Zhongke Refining and Petrochemical project, phase II of Hainan high-efficiency and environment-friendly aromatics project, Gulei and Zhong'an projects, acquisition of interest in Shanghai SECCO, as well as projects regarding resource comprehensive utilisation and product structure adjustments.
- Corporate and others. RMB 2.4 billion was mainly for R&D facilities and information technology application projects.

In 2018, we will devote attention to the quality and profitability of investments, and constantly optimise our investment projects. Capital expenditures for the year are budgeted at RMB 117.0 billion, including:

- Exploration and production. The planned capital expenditure in 2018 for this segment is approximately RMB 48.5 billion, mainly for the shale gas development in southwest China, the natural gas project in north China and crude capacity building in northwest China, as well as natural gas pipelines and storage projects, and overseas oil and gas projects.
- *Refining*. The planned capital expenditure in 2018 for this segment is RMB 28.8 billion, mainly for Zhongke Refining and Petrochemical Project, the structural adjustments of refining business in Zhenhai, Maoming and Tianjin subsidiaries, and the quality upgrading of GB VI standard gasoline and diesel.
- *Marketing and distribution*. The planned capital expenditure in 2018 for this segment is RMB 18.5 billion. We expect to focus on constructing and renovating pipelines and service stations and building refined oil product storage.
- Chemicals. The planned capital expenditure in 2018 for this segment is RMB 17.7 billion, mainly for Zhongke Refining and Petrochemical Project, the high-efficiency and phase II of Hainan high-efficiency and environmental-friendly aromatics project, the integrated refining and petrochemical project in Gulei and the resource utilisation and structural adjustment projects in Zhenhai, Yangzi, Jinling, Maoming and Wuhan subsidiaries.
- *Corporate and others*. The planned capital expenditure in 2018 for this segment is RMB 3.5 billion, mainly for R&D facilities and information technology projects.

### **Research and Development**

Our expenditures for the research and development were RMB 5.65 billion in 2015, RMB 5.94 billion in 2016, and RMB 6.42 billion in 2017.

### **Consumer Price Index**

According to the data provided by the National Bureau of Statistics, the consumer price index (CPI) in the PRC increased by 1.6% in 2017 (CPI increased by 2.0% in 2016) over 2016 and increased by 3.6% over 2015. According to China's official analysis, the decrease of consumer price index in the PRC during 2017 was due to the decrease in prices of food, mainly for pork and fresh vegetables prices, which is the first decline since 2003. Inflation has not had a significant impact on our results of operations in 2017.

#### ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

#### A. DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

#### Directors

The table and discussion below set forth certain information concerning our directors. The current term for all our directors is three years, which will expire in May 2018.

| Name           | Age | Position with the Company              |
|----------------|-----|--|
| Dai Houliang   | 54  | Vice Chairman, President               |
| Li Yunpeng     | 58  | Director                               |
| Wang Zhigang   | 60  | Former Director, Senior Vice President |
| Zhang Haichao  | 60  | Former Director, Senior Vice President |
| Jiao Fangzheng | 55  | Director, Senior Vice President        |
| Ma Yongsheng   | 56  | Director, Senior Vice President        |
| Jiang Xiaoming | 64  | Independent Director                   |
| Andrew Y. Yan  | 60  | Independent Director                   |
| Tang Min       | 64  | Independent Director                   |
| Fan Gang       | 64  | Independent Director                   |

Dai Houliang, aged 54, Vice Chairman of Board of Directors and President of Sinopec Corp. Mr. Dai is a professor level senior engineer with a Ph.D. degree and an academician of the Chinese Academy of Engineering. In December 1997, he was appointed as Vice President of Yangzi Petrochemical Corporation; in April 1998, he served as Director and Vice President of Yangzi Petrochemical Co., Ltd.; in July 2002, he served as Vice Chairman of Board of Directors, President of Yangzi Petrochemical Co., Ltd. and Director of Yangzi Petrochemical Corporation; in December 2003, he served as Chairman of Board of Directors and President of Yangzi Petrochemical Co., Ltd. and concurrently as Chairman of Board of Directors of Yangzi Petrochemical Corporation; in December 2004, he served concurrently as Chairman of Board of Directors of BASF-YPC Company Limited; in September 2005, he was appointed as Deputy CFO of Sinopec Corp.; in November 2005, he was appointed as Vice President of Sinopec Corp.; in May 2006, he served as Director, Senior Vice President and CFO of Sinopec Corp.; in June 2008, he served as a member of the Leading Party Member Group of China Petrochemical Co., Ltd.; in March 2013, he was appointed concurrently as Chairman of Sinopec Catalyst Co., Ltd.; and in May 2009, he was elected as Director and appointed as Senior Vice President of Sinopec Corp. in May 2016, he was appointed as the President and Deputy Secretary of the Leading Party Member Group of China Petrochemical Corporation and since August 2016, he was elected as the Vice Chairman of the Board and appointed as President of Sinopec Corp.

Li Yunpeng, aged 58, Director of Sinopec Corp. Mr. Li is a senior administration engineer with a master degree in engineering. In January 1998, he was appointed as deputy General Manager of Executive Division of China Ocean Shipping (Group) Company ("COSCO"); in September 1998, he served as Deputy Secretary of Discipline Inspection Committee, Director of Supervision Office and concurrently served as General Manager of Supervision Division of COSCO; in November 1999, he was appointed as General Manager of Human Resource Division of COSCO; and in September 2000, he served as Head of Organisation Department of COSCO; in December 2000, he was appointed as Secretary of Communist Youth League Committee of COSCO; in April 2003, he was appointed as Assistant President of COSCO; in April 2004, he served as a member of the Leading Party Member Group and Team Leader of the Discipline Inspection Group of CPC Leading Group of COSCO; in December 2011, he was appointed as Executive Vice President and a member of the Leading Party Member Group of COSCO; in June 2013, he served as President and a member of the Leading Party Member Group of COSCO; in July 2013, he served as Director of COSCO; and in February 2017, Mr. Li was appointed as Deputy Secretary of the Leading Party Member Group and Vice President of China Petrochemical Corporation. In June 2017, he was elected as Director of Sinopec Corp.

Wang Zhigang, aged 60, former Director and Senior Vice President of Sinopec Corp. Mr. Wang is a professor level senior engineer with a Ph.D. Degree. In February 2000, he was appointed as Vice President of Sinopec Shengli Oilfield Co., Ltd.; in June 2000, he served as Board Director and President of Shengli Oilfield Co., Ltd.; in November 2001, he was appointed temporarily as Deputy Director General and Deputy Secretary of Leading Party Member Group of Economic and Trade Commission, Ningxia Hui Autonomous Region; in April 2003, he was appointed as Vice President of Sinopec Corp.; in June 2003, he was appointed concurrently as Director General of Exploration and Production Department of Sinopec Corp.; in February 2005, he was appointed as Member of the Leading Party Member Group of China Petrochemical Corporation; in March 2005, he was appointed as Senior Vice President of Sinopec Corp.; in January 2007, he was appointed concurrently as Vice Chairman of Sinopec International Petroleum Exploration and Production Corporation; in September 2014, he was appointed concurrently as Chairman of Board of Directors of Sinopec International Petroleum Exploration and Production Corporation; and in May 2006, he was elected as Director and appointed as Senior Vice President of Sinopec Corp. In January 2018, he resigned as an executive director, a member of Strategy Committee of the Board and the Senior Vice President of Sinopec Corp.

Zhang Haichao, aged 60, former Director and Senior Vice President of Sinopec Corp. Mr. Zhang is a professor level senior economist with a master degree. In March 1998, he was appointed as Vice President of Zhejiang Petroleum Corporation; in September 1999, he was appointed as President of Zhejiang Petroleum Corporation; in February 2000, he was appointed as President of Sinopec Zhejiang Petroleum Co., Ltd.; in April 2003, he was elected as Employee's Representative Supervisor of Sinopec Corp.; in April 2004, he served as Chairman of Board of Directors of Sinopec-BP Zhejiang Petroleum Sales Co., Ltd.; in October 2004, he served as Secretary of CPC Committee, Vice Chairman of Board of Directors, and Vice President of Sinopec Sales Co., Ltd.; in November 2005 he served as Vice President of Sinopec Corp., Secretary of the Leading Party Member Group, Chairman of Board of Directors, and President of Sinopec Sales Co., Ltd.; in June 2006, he served as Chairman of Board of Directors, and President of Sinopec Sales Co., Ltd.; in July 2014, he was appointed as Member of the Leading Party Member Group and Vice President of China Petrochemical Corporation; and in May 2015, he was elected as Board Director and appointed as Senior Vice President of Sinopec Corp. In January 2018, he resigned as an executive director, a member of Strategy Committee of the Board and the Senior Vice President of Sinopec Corp.

Jiao Fangzheng, aged 55, Director and Senior Vice President of Sinopec Corp. Mr. Jiao is a professor level senior engineer with a Ph.D. degree. In January 1999, he was appointed as Chief Geologist in Zhongyuan Petroleum Exploration Bureau of China Petrochemical Corporation; in February 2000, he was appointed as Vice President and Chief Geologist of Sinopec Zhongyuan Oilfield Company; in July 2000, he was appointed as Deputy Director General of Sinopec Petroleum Exploration & Development Research Institute; in March 2001, he was appointed as Deputy Director General of Sinopec Exploration & Production Department; in June 2004, he was appointed as President of Sinopec Northwest Oilfield Company; in October 2006, he was appointed as Vice President of Sinopec Corp. in July 2010, he was appointed as the Director General of Sinopec Exploration & Production Department; in July 2014, he was appointed as Member of the Leading Party Member Group and Vice President of China Petrochemical Corporation; in September 2014, he was elected concurrently as Chairman of Board of Directors of Sinopec Oilfield Service Corporation and Vice Chairman of Board of Directors of Sinopec International Petroleum Exploration and Production Corporation; and in May 2015, he was elected as Director and appointed as Senior Vice President of Sinopec Corp.

Ma Yongsheng, aged 56, Director and Senior Vice President of Sinopec Corp. Mr. Ma is a professor level senior engineer with a Ph.D. degree and an academician of the Chinese Academy of Engineering. Mr. Ma is the member of the thirteenth national committee of CPPCC. In April 2002, he was appointed as Chief Geologist of Sinopec Southern Exploration and Production Company; in April 2006, he was appointed as Executive Deputy Manager (in charge of overall management), Chief Geologist of Sinopec Southern Exploration and Production Company; in January 2007, he was appointed as Manager and Party Secretary of CPC Committee of Sinopec Southern Exploration and Production Company; in March 2007, he served as General Manager and Deputy Party Secretary of CPC Committee of Sinopec Exploration Company; in May 2007, he was appointed as Deputy Commander of Sichuan-East China Gas Transmission Construction Project Headquarter of Sinopec Corp., General Manager and Deputy Secretary of CPC Committee of Sinopec Exploration Company; in May 2008, he was appointed as Deputy Director General of Exploration and Production Department of Sinopec Corp. (Director General Level) and Deputy Commander of Sichuan-East China Gas Transmission Construction Project Headquarter; in July 2010, he served as Deputy Chief Geologist of Sinopec Corp.; in August 2013, he was appointed as Chief Geologist of Sinopec Corp.; in December 2015, he served as Vice President of China Petrochemical Corporation and appointed as Senior Vice President of Sinopec Corp.; in January 2017, he was appointed as Member of the Leading Party Member Group of China Petrochemical Corporation. In February 2016, he was elected as Director of Sinopec Corp.

Jiang Xiaoming, aged 64, Independent Director of Sinopec Corp. Mr. Jiang has a Ph.D. in economics. Presently, he acts as the member of the United Nations Board of Investment, Chairman of the Board of Directors of Hong Kong Saibo International Co. Ltd., Independent Director of COSCO International, Senior Fellow of the University of Cambridge Business School, and trustee of University of Cambridge China Development Fund. Between 1992 and 1998, he acted as the Vice President of United Nations Staff Retirement Fund; between 1999 and 2003, he acted as the Chairman of the Board of Directors of Frasers Property (China) Co., Ltd.; and he has previously acted as the member of the Eleventh and Twelfth national committee of CPPCC, the Board Director of JSW Energy Ltd., member of the Advisory Committee of American Capital Group and Rothschild, the British Investment Bank, and Independent Director of China Oilfield Services Limited. From May 2012 to the present, he has acted as Independent Director of Sinopec Corp.

Andrew Y. Yan, aged 60, Independent Director of Sinopec Corp. Mr. Yan is the founding Managing Partner of SAIF Partners. He studied in Nanjing University of Aeronautics and Astronautics, Peking University and Princeton University and earned a master degree from Princeton University. Presently, he acts as the Independent Non-executive Director of China Resources Land Limited, the Non-executive Director of China Huiyuan Juice Group Limited, Feng Deli Holdings Limited and Guodian Technology & Environment Group Corporation Limited; the Independent Director of Beijing BlueFocus Brand Management Consulting Co., Ltd and TCL Group; and the Director of ATA Co., Ltd and Ata Online(Beijing)Education Technology Co.,Ltd.. From 1989 to 1994, he acted as Economist of the World Bank headquarters in Washington, research Fellow of Hudson Institute, an American famous research think tank, and acted as the director of APAC Strategic Planning & Business Development of Sprint International Corporation; between 1994 and 2001, he acted as the Managing Director of Emerging Markets Partnership and Director of Hong Kong Office of AIG Asia Infrastructural Investment Fund. From May 2012 to the present, he has acted as Independent Director of Sinopec Corp.

Tang Min, aged 64, Independent Director of Sinopec Corp. Mr. Tang has a Ph.D. in economics. He presently acts as a Counsellor of the State Council of the PRC and the Executive Vice Chairman of YouChange China Social Entrepreneur Foundation, Independent Director of Minmetals Development Co., Ltd, Origin Agritech Limited and Baoshang Bank Co., Ltd. He has served as economist and senior economist at the Economic Research Centre of the Asian Development Bank between 1989 and 2000; chief economist at the Representative office of the Asian Development Bank in China between 2000 and 2004; deputy representative at the Representative Office of the Asian Development Bank in China between 2007 and the deputy secretary-general of the China Development Research Foundation between 2007 and 2010. From May 2015 to the present, he has acted as Independent Director of Sinopec Corp.

Fan Gang, aged 64, Independent Director of Sinopec Corp. Mr. Fan has a Ph.D. in economics. He presently acts as Vice President of China Society of Economic Reform, Head of the National Economic Research Institution of China Reform Foundation, President of China Development Institute (Shenzhen) and an economics professor at Peking University. He began to work for Chinese Academy of Social Sciences in 1988, and subsequently served as Director of Editorial Department for the Economic Research Journal between 1992 and 1993 and as Deputy Head of the Institute of Economics of Chinese Academy of Social Sciences between 1994 and 1995. In 1996, he was redesignated to work for China Society of Economic Reform, and subsequently founded the National Economic Research Institution. From 2006 to 2010, and from 2015 to the present, he has served as a member of the Monetary Policy Committee of People's Bank of China. Mr. Fan is recognised as one of the National Young and Middle-Aged Experts with Outstanding Contributions. From May 2015 to the present, he has acted as Independent Director of Sinopec Corp.

#### **Supervisors**

The table and discussion below set forth certain information concerning our supervisors. The current term of our supervisors is three years, which will expire in May 2018.

| Name           | Age | Position with the Company          |
|----------------|-----|------------------------------------|
| Zhao Dong      | 47  | Chairman                           |
| Liu Zhongyun   | 54  | Former Supervisor                  |
| Zhou Hengyou   | 54  | Supervisor                         |
| Zou Huiping    | 57  | Supervisor                         |
| Jiang Zhenying | 53  | Employee Representative Supervisor |
| Yu Renming     | 54  | Employee Representative Supervisor |
| Yu Xizhi       | 55  | Employee Representative Supervisor |
|                |     |                                    |
|                | 59  |                                    |
|                |     |                                    |

Zhao Dong, aged 47, Chairman of Board of Supervisors of Sinopec Corp. Mr. Zhao is a professor-level senior accountant with a doctor's degree. In July 2002, he was appointed as chief accountant and manager of financial assets department of CNPC International (Nile) Ltd.; in January 2005, he was appointed as deputy chief accountant and executive deputy director of financial and capital operation department of China National Oil and Gas Exploration and Development Corporation; in April 2005, he was appointed as deputy chief accountant and manager of financial and capital operation department of China National Oil and Gas Exploration and Development Corporation; in June 2008, he was appointed as chief accountant of China National Oil and Gas Exploration and Development Corporation; in October 2009, he was appointed as chief accountant of China National Oil and Gas Exploration and Development Corporation and chief financial officer of PetroChina International Investment Company Limited; in September 2012, he was appointed as vice general manager of CNPC Nile Company and in August 2013, he was appointed as general manager of CNPC Nile Company; in November 2015, he was appointed as chief financial officer of PetroChina Company Limited. He has been a member of the Leading Party Member Group and chief accountant of China Petrochemical Corporation since November 2016; in June 2017, he was elected as Chairman of Board of Supervisors of Sinopec Corp.

Liu Zhongyun, aged 54, former Supervisor of Sinopec Corp. Mr. Liu is a professor level senior engineer with a Ph.D. in engineering. In December 2002, he was appointed as a standing committee member of CPC Committee and Director of Organisation Department of Shengli Petroleum Administration Bureau; in November 2004, he was appointed as Deputy Secretary of CPC Committee of Shengli Petroleum Administration Bureau; in December 2005, he was appointed as Manager of Sinopec Shengli Oilfield Branch; in December 2008, he was appointed as Secretary of CPC Committee of Sinopec International Petroleum Exploration and Production Corporation; in July 2010, he was appointed as General Manager of Sinopec Northwest Oilfield Company, Director General of Northwest Petroleum Bureau under China Petrochemical Corporation. Since August 2014, Mr. Liu has acted as Assistant to President and Director General of HR Department of China Petrochemical Corporation, and in May 2015, he was elected as Supervisor of Sinopec Corp.; in March 2017, he was appointed as Vice President of China Petrochemical Corporation; in February 2018, he resigned as Supervisor of Sinopec Corp.; in February 2018, he was appointed as Senior Vice President of Sinopec Corp.

Zhou Hengyou, aged 54, Supervisor of Sinopec Corp. Mr. Zhou is a professor level senior administration engineer and with a master degree. In December 1998, Mr. Zhou was appointed as a standing committee member of CPC Committee and Deputy Labour Union Chairman of Jiangsu Petroleum Exploration Bureau; in February 1999, he was appointed as a standing committee member of CPC Committee and Labour Union Chairman of Jiangsu Petroleum Exploration Bureau of China Petrochemical Corporation; in December 2002, he was appointed as Deputy Secretary of CPC Committee and Labour Union Chairman of Jiangsu Petroleum Exploration Bureau; in June 2004, he was appointed as Deputy Secretary of CPC Committee and Secretary of CPC Disciplinary Inspection Committee of Jiangsu Petroleum Exploration Bureau; in August 2005, he was appointed as Secretary of CPC Committee of Jiangsu Petroleum Exploration Bureau; in March 2011,he was appointed as Director General and Secretary of CPC Committee of China Petrochemical News. In March 2015, he was appointed as Director General of the General Office of China Petrochemical Corporation, Director General of Policy Research Department of the General Office and Director General of President's office of Sinopec Corp. In August 2015, he was appointed as Director General of Board of Directors Office under China Petrochemical Corporation; and in May 2015, he was elected as Supervisor of Sinopec Corp.

Zou Huiping, aged 57, Supervisor of Sinopec Corp. Mr. Zou is a professor level senior accountant with a university diploma. In November 1998, he was appointed as Chief Accountant in Guangzhou Petrochemical General Plant of China Petrochemical Corporation; in February 2000, he was appointed as Deputy Director General of Finance & Assets Department of China Petrochemical Corporation; in December 2001, he was appointed as Deputy Director General of Finance & Planning Department of China Petrochemical Corporation; in March 2006, he was appointed as Director General of Finance & Assets Department of Assets Management Co., Ltd. of China Petrochemical Corporation; in March 2006, he was appointed as Director General of Auditing Department of Sinopec Corp.; and in May 2006, he was elected as Supervisor of Sinopec Corp.

Jiang Zhenying, aged 53, Employee's Representative Supervisor of Sinopec Corp. Mr. Jiang is a professor level senior economist with a doctor degree. In December 1998, he was appointed as the Vice President of the China Petrochemical Supplies & Equipment Co., Ltd.; in February 2000, he was appointed as the Deputy Director General of Sinopec Procurement Management Department; in December 2001, he was appointed as the Director General of Sinopec Procurement Management Department and in November 2005 he concurrently held the positions of Chairman of Board of Directors, President and Secretary of CPC Committee of China Petrochemical International Co., Ltd.; in March 2006, he was appointed as the Director General (General Manager), Executive Director and Secretary of the CPC Committee of Sinopec Procurement Management Department (Sinopec International Co. Ltd.); in April 2010, he was appointed as the Director General (General Manager), Executive Director and Deputy Secretary of the CPC Committee of Sinopec Procurement Management Department (Sinopec International Co. Ltd.); in November 2014, he was appointed as Director General of Safety Supervisory Department of Sinopec Corp.; in May 2017, he was appointed as Deputy Director of the Leading Group Office of Party Inspection Work of China Petrochemical Corporation and the leader of overseas enterprises inspection group; and since December 2010, he was elected as the Employee's Representative Supervisor of Sinopec Corp.

Yu Renming, aged 54, Employee's Representative Supervisor of Sinopec Corp. Mr. Yu is a professor level senior engineer with a university diploma. In June 2000, he was appointed as the Deputy General Manager of Sinopec Zhenhai Refining & Chemical Co., Ltd.; in June 2003, he was appointed as the Board Director and Deputy General Manager of Sinopec Zhenhai Refining & Chemical Co., Ltd.; in September 2006, he was appointed as the Vice President of Sinopec Zhenhai Refining & Chemical Company; in September 2007, he was appointed as the President and the Vice Secretary of CPC committee of Sinopec Zhenhai Refining & Chemical Company; in January 2008, he was appointed as the Director General of Sinopec Production Management Department; in December 2017, he was appointed as the Director General of Refining Department of Sinopec Corp.; and in December 2010, he was elected as Employee's Representative Supervisor of Sinopec Corp.

Yu Xizhi, aged 55, Employee's Representative Supervisor of Sinopec Corp. Mr Yu is a professor-level senior engineer with a Ph.D. in engineering. In August 1997, he was appointed as Deputy Manager of Anqing Petrochemical Complex and Manager of Fertiliser Plant; in September 1999, he became a member of the CPC Standing Committee of Anqing Petrochemical Complex; in February 2000, he was appointed as Deputy Manager of Sinopec Anqing Company and in September 2000, he was appointed as Manager of Sinopec Anqing Company. In January 2005, he was appointed as Manager of Anqing Petrochemical Complex and from May 2009 to July 2010, he served a temporary position at the Standing Committee of the CPC Anqing Municipal Committee. In July 2010, he became General Manager and Deputy Secretary of the CPC Committee of Maoming Petrochemical Company and General Manager of Sinopec Maoming Company; in July 2016, Mr. Yu was appointed as head of Maoming-Zhanjiang Integration Leading Group; in December 2016, he became Executive Director, General Manager and Deputy Secretary of the CPC Committee of Zhongke (Guangdong) Refining and Petrochemical Co., Ltd. Since April 2017, Mr. Yu has been Director General of Human Resources Department of China Petrochemical Corporation and Sinopec Corp. In June 2017, he was elected as Employee's Representative Supervisor of Sinopec Corp.

### **Other Executive Officers**

| Name           | Age | Positions with Sinopec Corp.                       |
|----------------|-----|--|
| Wang Dehua     | 51  | CFO  |
| Ling Yiqun     | 55  | Former Vice President                              |
| Huang Wensheng | 51  | Vice President/Secretary to the Board of Directors |
| Chang Zhenyong | 59  | Vice President                                     |
| Lei Dianwu     | 55  | Vice President                                     |

Wang Dehua, aged 51, Chief Financial Officer of Sinopec Corp. Mr. Wang is a senior accountant with university diploma. In January 2001, he was appointed as Deputy Director General of Finance Department of Sinopec Corp.; in May 2014, he was appointed as Acting Director General of Finance Department of Sinopec Corp.; in October 2015, he was promoted to Director General of Finance Department of China Petrochemical Corporation; in August 2016, he was appointed as Director General of Finance Department of Sinopec Corp.. Mr. Wang now concurrently acts as Vice Chairman of Sinopec Finance CO., Ltd. and Taiping & Sinopec Financial Leasing Co., in September 2016, he was appointed as Chief Financial Officer of Sinopec Corp.

Ling Yiqun, aged 55, former Vice President of Sinopec Corp. Mr. Ling is a professor level senior engineer with a Ph.D. degree. From 1983, he worked in the refinery of Beijing Yanshan Petrochemical Company and the Refining Department of Beijing Yanshan Petrochemical Company Ltd. In February 2000, he was appointed as the Deputy Director General of Refining Department of Sinopec Corp.; in June 2003, he was appointed as the Director General of Refining Department of Sinopec Corp.; in July 2010, he was appointed as Vice President of Sinopec Corp; in May 2012, he was appointed as Executive Director, President and Secretary of CPC Committee of Sinopec Refinery Product Sales Company Limited; in August 2013, he was appointed as the President of Sinopec Qilu Company; in December 2016, he was elected concurrently as Chairman of Board of Directors of Sinopec Engineering(Group) Co. Ltd.; in March 2017, he was appointed as Vice President of China Petrochemical Corporation and in February 2018, he was appointed as Senior Vice President of Sinopec Corp.

Huang Wensheng, aged 51, Vice President of Sinopec Corp., Secretary to the Board of Directors. Mr. Huang is a professor level senior economist with a university diploma. In March 2003, he was appointed as Deputy Director General of the Board Secretariat of Sinopec Corp.; in May 2006, he was appointed as Representative on Securities Matters of Sinopec Corp.; since August 2009, He has served as the Deputy Director General of President's office of Sinopec Corp. In September 2009, he was appointed as Director General of the Board Secretariat of Sinopec Corp.; in May 2012, he was appointed as Secretary to the Board of Directors of Sinopec Corp.; and in May 2014, he was appointed as Vice President of Sinopec Corp.

Chang Zhenyong, aged 59, Vice President of Sinopec Corp. Mr. Chang is a professor level senior engineer with a master's degree. In September 1997, he was appointed as Vice President of Tianjin Petrochemical Company; in February 2000, he was appointed as Vice President of Sinopec Tianjin Company; and in September 2000, he was promoted to President of Sinopec Tianjin Company; from February 2004, he was appointed temporarily as member of Standing Committee of CPC Committee of Beihai, Guangxi; in March 2004, he was appointed temporarily as deputy mayor of Beihai, Guangxi; in November 2005, he was appointed as Director General of Production and Operation Management Department of Sinopec Corp.; in December 2007, he was appointed as President of Qilu Petrochemical Company and President of Sinopec Qilu Company; in April 2010, he was appointed as Employee's Representative Supervisor of Sinopec Corp.; in July 2010, he was appointed as Deputy Chief Engineer and concurrently as Director General of Chemicals Department of Sinopec Corp.; in August 2012, he was appointed concurrently as Vice Chairman of Board of Directors of Sinopec Great Wall Energy & Chemical Co., Ltd.; in November 2014, he was appointed as Executive Director and President of Sinopec Chemical Products Sales Co. Ltd and concurrently as Chairman of Board of Directors of Sinopec Chemical Products Sales (Hong Kong) Co. Ltd.; and in May 2014, he was appointed as Vice President of Sinopec Corp.

Lei Dianwu, aged 55, Vice President of Sinopec Corp. Mr. Lei is a Professor level Senior Engineer with a university diploma. In October 1995, he was appointed as Vice President of Yangzi Petrochemical Corporation; in December 1997, he was appointed as Director General of Planning & Development Department in China Eastern United Petrochemical (Group) Co., Ltd.; in May 1998, he was appointed as Vice President of Yangzi Petrochemical Corporation; in August 1998 he was appointed as Vice President of Yangzi Petrochemical Co., Ltd.; in March 1999, he was appointed temporarily as Deputy Director General of Development & Planning Department of China Petrochemical Corporation; in February 2000, he was appointed as Deputy Director General of Development & Planning Department of Sinopec Corp.; in March 2001, he was appointed as Director General of Development & Planning Department of Sinopec Corp.; in March 2009, he was appointed as Assistant to President of China Petrochemical Corporation; in August 2013, he was appointed as the Chief Economist of China Petrochemical Corporation; in October 2015, he was appointed as Secretary to the Board of Directors of China Petrochemical Corporation; and in May 2009, he was appointed as Vice President of Sinopec Corp.

# B. COMPENSATION

# Salaries of Directors, Supervisors and Members of the Senior Management

Our directors and supervisors who hold working posts with us and other senior management members receive all their compensation from us in cash. Our compensation committee, with assistances from relevant administrative departments, determines the appropriate level of annual compensation for each of our directors and supervisors who hold working posts with us and other senior management members in two components: a base salary component and a performance rewards component. The base salary component is a fixed amount that will be paid on monthly basis. The performance rewards component is paid in one lump sum at about year end and the exact amounts of the performance rewards to be paid will be based on the completion by the Company of certain performance targets (key performance indicators, or KPIs) which are set at the beginning of the year and reviewed at year end. The KPIs cover areas such as profitability, workplace safety and environmental protection. Based on the annual review by our compensation committee, with the assistances from relevant administrative departments, of the Company's completion of various KPIs, our directors and supervisors who hold working posts with us and other senior management members will receive full or partial payments as their performance rewards.

The following table sets forth the compensation on individual basis for our directors, supervisors and executive officers who received compensation from us in 2017.

| Name                     | Position with the Company                          | Remuneration paid by the Company in 2017 (RMB in thousands before tax) |
|--------------------------|--|--|
| Directors                |  | ,  |
| Dai Houliang             | Vice Chairman, President                           | 843.8  |
| Li Yunpeng               | Director   | <del>-</del>   |
| Wang Zhigang             | Former Director, Senior Vice President             | 769.9  |
| Zhang Haichao            | Former Director, Senior Vice President             | <u> </u>   |
| Jiao Fangzheng           | Director, Senior Vice President                    | <del></del>  |
| Ma Yongsheng             | Director, Senior Vice President                    | <del>_</del>   |
| Jiang Xiaoming           | Independent Director                               | 300.0  |
| Andrew Y. Yan            | Independent Director                               | 300.0  |
| Tang Min                 | Independent Director                               | 300.0  |
| Fan Gang                 | Independent Director                               | 300.0  |
| Wang Yupu                | Former Chairman                                    | _  |
| Supervisors              |  |  |
| Zhao Dong                | Chairman of the Board of Supervisors               | _  |
| Liu Zhongyun             | Former Supervisor                                  | _  |
| Zhou Hengyou             | Supervisor   | _  |
| Zou Huiping              | Supervisor   | 758.2  |
| Jiang Zhenying           | Employee Representative Supervisor                 | 758.2  |
| Yu Renming               | Employee Representative Supervisor                 | 758.2  |
| Yu Xizhi                 | Employee Representative Supervisor                 | 265.9  |
| Liu Yun                  | Former Chairman of the Board of Supervisors        | <del>_</del>   |
| Wang Yajun               | Former Employee Representative Supervisor          | 417.3  |
| Other Executive officers |  |  |
| Wang Dehua               | CFO  | 866.3  |
| Ling Yiqun               | Former Vice President                              | _  |
| Huang Wensheng           | Secretary of the Board of Directors/Vice President | 892.9  |
| Chang Zhenyong           | Vice President                                     | 892.9  |
| Lei Dianwu               | Vice President                                     | 892.9  |
| Jiang Zhenghong          | Former Vice President                              | 755.4  |

# C. BOARD PRACTICE

We have eight directors. We have four special board committees, namely, the audit committee, the strategic committee, the remuneration and evaluation committee and social responsibility management committee. The majority of the members of the remuneration and evaluation committee and all members of the audit committee are independent directors. In addition, there is at least one independent director who is a financial expert in the audit committee.

The main responsibilities of the audit committee include:

• to propose the appointment or replacement of the independent auditor;

- to oversee the internal auditing system and its implementation;
- to coordinate the communication between the internal auditing department and the independent auditor;
- to examine and approve financial information and it disclosure; and
- to examine the financial policies, internal auditing, internal control and risk management system.

The members of our audit committee are Andrew Y. Yan, Jiang Xiaoming and Tang Min, all of whom are our Independent Non-executive Directors. Our Board has determined that Andrew Y. Yan qualifies as an audit committee financial expert.

The main responsibilities of the strategy committee are to conduct research and put forward proposals on the long-term development strategy and significant investments.

The members of our strategy committee are Dai Houliang, Jiao Fangzheng, Ma Yongsheng, Andrew Y. Yan and Fan Gang.

The main responsibilities of the remuneration and appraisal committee (remuneration committee) include:

- to review evaluation standards on the performance of directors and senior management, to conduct their evaluations and make suggestions to the Board; and
- to review compensation policies and scheme in respect of the remuneration of directors, supervisors and executive officers, and make suggestions to the Board.

The members of our remuneration committee are Fan Gang, Dai Houliang and Jiang Xiaoming.

The main responsibilities of the social responsibility management committee are to research on the policy, governance, strategy and planning for the Company's social responsibility and put forward proposals to the Board.

The members of social responsibility management committee are Dai Houliang and Tang Min.

Our directors have entered into directors service contracts with us and under such contracts, there is no severance pay arrangements for our directors.

As a joint stock company incorporated in the PRC, we are required by the PRC law to have in place a board of supervisors. The board of supervisors shall consist of no less than three supervisors, and at least one third of the board of supervisors shall be employee representative supervisors. Employee representative supervisors shall be elected by our employees at a meeting of employee representatives, a general meeting of employees or through other means.

According to our articles of association, the main responsibilities of our board of supervisors include:

- to review the Company's financial affairs;
- to supervise directors and executive officers when they perform their duties, and to propose to our shareholders the dismissal of any director or executive officer who has violated our articles of association and relevant laws and regulation;
- to demand directors or executive officers to rectify their conducts that conflict with our interests;
- to propose the call of any extraordinary general meeting of shareholders to the Board, and to convene and preside over such shareholder meeting if the Board fails to do so; and
- to initiate legal proceedings against directors and executive officers on behalf of the Company.

Our board of supervisors currently consists of six supervisors including three employee representative supervisors. In 2016, the supervisors attended the Company's shareholder meetings and presented at the Company's board meetings, attended the trainings for directors and supervisors of listed companies organized by Beijing Securities Supervisory Bureau under CSRC.. A detailed report of our board of supervisors' performance overview to our shareholders for the year 2016 was included in our annual report to shareholders, and could be found in the Section "Report of the Board of Supervisors" in our Form 6-K submitted to the Securities and Exchange Commission on April 7, 2017.

#### D. EMPLOYEES

As of December 31, 2015, 2016 and 2017, we had approximately 351,019, 451,611 and 446,225 employees, respectively. The following table sets forth the number of our employees by our business segments, their scope of work and their education as of December 31, 2017.

| By Segment  | Number of Employees | Percentage of Total<br>Number of Employees<br>(%) |
|---|---------------------|---|
| Exploration and production                              | 148,069             | 33.2  |
| Refining  | 70,128              | 15.7  |
| Marketing and distribution                              | 153,804             | 34.5  |
| Chemicals   | 63,052              | 14.1  |
| Corporate and other                                     | 11,172              | 2.5   |
| Total   | 446,225             | 100   |
| By Employee's Scope of Work                             | Number of Employees | Percentage of Total<br>Number of Employees<br>(%) |
| Production  | 163,319             | 36.6  |
| Sales   | 142,824             | 32.0  |
| Technical   | 83,816              | 18.8  |
| Finance   | 10,951              | 2.4   |
| Administration  | 35,698              | 8.0   |
| Others  | 9,617               | 2.2   |
| Total   | 446,225             | 100   |
| By Education  | Number of Employees | Percentage of Total<br>Number of Employees<br>(%) |
| Master's degree and above                               | 15,707              | 3.5   |
| University  | 109,274             | 24.5  |
| Junior college  | 98,983              | 22.2  |
| Technical secondary school                              | 40,272              | 9.0   |
| Senior high school and technical school degree or below | 181,989             | 40.8  |
| Total   | 446,225             | 100   |

During this report period, there has been no significant change to our core technical team and key technicians.

We have a workers' association that protects employee rights, organizes educational programs, assists in the fulfillment of economic objectives, encourages employee participation in management decisions, and assists in mediating disputes between us and individual employees. We have not been subject to any strikes or other labor disturbances that have interfered with our operation, and we believe that our relations with our employees are good.

The total remuneration of our employees includes salary, performance bonuses and allowances. Employees also receive certain subsidies in housing, health services, education and other miscellaneous items.

#### E. SHARE OWNERSHIP

As of December 31, 2017, except our vice president Ling Yiqun who holds 13,000 shares of our A shares, none of our directors, supervisors and executive officers beneficially own any of our shares.

#### ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

#### A. MAJOR SHAREHOLDERS

The following table sets forth information regarding our 5% or more shareholders as of April 17, 2018.

|                                      | Number of Shares Owned | Percentage of |
|--------------------------------------|------------------------|---------------|
| Shareholder                          | (in millions)          | Ownership (%) |
| Sinopec Group Company <sup>(1)</sup> | 86,346                 | 71.32         |

(1) Inclusive of 553,150,000 H shares held by Sinopec Century Bright Capital Investment Ltd. (overseas wholly-owned subsidiary of Sinopec Group Company) under HKSCC Nominees Limited.

As of April 17, 2018, 1,671,084,700 H shares were registered in the name of a nominee of Citibank, N.A., the depositary under our ADS deposit agreement. Citibank, N.A. has advised us that, as of April 17, 2018, 16,710,847 ADSs, representing 1,671,084,700 H shares, were held of record by Cede & Co. and 36 other registered shareholders domiciled in and outside of the United States. We have no further information as to our shares held, or beneficially owned, by U.S. persons.

To avoid the adverse effects brought by intra-industry competition to the maximum extent possible, we and Sinopec Group Company have entered into a non-competition agreement whereby Sinopec Group Company has agreed to: refrain from operating new businesses which compete or could compete with us in any of our domestic or international markets; grant us an option to purchase Sinopec Group Company's operations that compete or could compete with our businesses; operate its sales enterprises in a manner uniform to our sales and service operations; and appoint us as sales agent for certain of its products which compete or could compete with our products.

In March 2017, Sinopec Group has earnestly fulfilled its undertaking in eliminating competitions in chemical business with us through: (1) subscribing capital contribution of joint ventures controlled by us, by way of injecting net assets of certain chemical business and cash; (2) authorizing us to be in charge of production plan, management and sales of the remaining chemical business. The competition in chemical business between Sinopec Group and us has been eliminated.

To further avoid the competition with us, Sinopec Group Company granted us an undertaking, as amended, whereby Sinopec Group Company undertakes that: first, we shall become the sole platform which deals with the exploration and production of oil and gas, oil refining, chemicals, sale of petroleum products; second, given that Sinopec Group Company engages in the same or similar businesses as us with regard to the exploration and production of overseas petroleum and natural gas, we have the option, after thorough analysis from political, economic and other perspectives, to require Sinopec Group Company to sell its overseas oil and gas assets owned at the time, to the extent remaining in its possession, to us. Sinopec Group Company further promises to sell its overseas oil and gas assets to us, provided that the aforementioned proposed acquisitions comply with the applicable laws and regulations, contractual obligations and other procedural requirements.

# B. RELATED PARTY TRANSACTIONS

Sinopec Group Company owned 71.32% of our outstanding equity as of April 17, 2018. Sinopec Group Company is able to exercise all the rights of a controlling shareholder, including the election of directors and voting in respect of amendments to our articles of association. Sinopec Group Company, as our controlling shareholder, is subject to certain non-controlling shareholder protection provisions under our articles of association.

We have engaged from time to time and will continue to engage in a variety of transactions with Sinopec Group Company, which provide a number of services to us, including ancillary supply, transport, educational and community services. The nature of our transactions with Sinopec Group Company is governed by a number of service and other contracts between Sinopec Group Company and us. A discussion of these agreements and arrangements is set forth under the heading "Item 7 — Major Shareholders and Related Party Transactions — Related Party Transactions" in our annual report on Form 20-F filed with the Securities and Exchange Commission on October 10, 2000, April 13, 2007, May 20, 2009, April 30, 2010, April 11, 2013, April 16, 2014, April 10, 2015, April 20, 2016 and April 24, 2017 respectively, and under the heading "Item 4 — Information on the Company — History and Development of the Company" of this annual report.

On August 26, 2015, we entered into a supplementary agreement of connected transactions with Sinopec Corp., whereby the terms of the Mutual Supply Agreement and the Cultural and Educational, Hygienic and Community Services Agreement (Exhibit 4.4) were extended from January 1, 2016 to December 31, 2018. The resolution relating to continuing connected transactions for the three years from 2016 to 2018 was approved at the first extraordinary general meeting for 2015 held on October 23, 2015. For details of the above continuing connected transactions, please refer to Exhibit 4.22. Capitalized terms used in this section shall have the same meaning as that used in the above-mentioned exhibit.

On August 26, 2015, we entered into an equity transfer agreement relating with Sinopec Baichuan Economic and Trading Company ("Baichuan Co.", a wholly-owned subsidiary of Sinopec Group Company), pursuant to which, we proposed to transfer 100% of the equity interest of Sinopec Beijing Jingtian Engineering and Construction Co., Ltd. ("Jingtian Co.") held by us to Baichuan Co. The final consideration of above-mentioned equity interest was around RMB 1.869 billion.

On October 29, 2015, we entered into a joint venture agreement with SAMC in relation to the formation of Gaoqiao. We and SAMC subscribed 55% and 45% of the registered capital of Gaoqiao, respectively.

On December 28, 2015, the Proposal on Providing Completion Guarantee for the Project Financing of Zhongtian Synergetic was considered and approved at the fourth meeting of the sixth session of Board, where our directors unanimously agreed to us providing a completion guarantee to Zhongtian Synergetic Ordos coal deep processing demonstration project subject to the provision of completion guarantees by the other shareholders of Zhongtian Synergetic on a pro-rata basis (the "Guarantee"). The Guarantee has been considered and approved at the first extraordinary general meeting for the year 2016. Zhongtian Synergetic is a connected party of the Company under the Shanghai Listing Rules because its vice chairman, Mr. Chang Zhenyong is a vice president of the Company. However, Zhongtian Synergetic is not a connected person under the Hong Kong Listing Rules.

For our related party transaction starting from January 1, 2016, please also see Note 32 of our consolidated financial statements included elsewhere in this annual report for a detailed discussion of our related party transactions.

In 2017, we provided RMB 1.46 billion of loans to certain affiliates of Sinopec Group Company. In addition, we received loans with a net amount of RMB 5.28 billion to certain affiliates of Sinopec Group Company in 2017.

The above-mentioned variety of transactions with Sinopec Group Company are in compliance with the upper limit of the amount of related party transactions approved by the shareholders and the Board.

### C. INTERESTS OF EXPERTS AND COUNSEL

Not applicable.

### ITEM 8. FINANCIAL INFORMATION

# A. CONSOLIDATED STATEMENTS AND OTHER FINANCIAL INFORMATION

See consolidated financial statements included in this annual report following Item 19.

### **Legal Proceedings**

We are involved in certain judicial and arbitral proceedings before Chinese courts or arbitral bodies concerning matters arising in connection with the conduct of our businesses. We believe, based on currently available information, that the results of such proceedings, in the aggregate, will not have a material adverse effect on our financial condition or results of operations.

#### **Dividend Distribution Policy**

In 2012, we amended our articles of association based on its original framework. Our dividend distribution policy was amended. According to our amended articles of association:

Our board of directors will determine the payment of dividends, if any, with respect to our shares on a per share basis. Any final dividend for a financial year shall be subject to shareholders' approval. The board may declare interim and special dividends at any time under general authorization by a shareholders' ordinary resolution. A decision to declare or to pay any dividends in the future, and the amount of any dividends, will depend on our results of operations, cash flows, financial condition, the payment by our subsidiaries of cash dividends to us, future prospects and other factors which our directors may determine are important.

For holders of our H shares, cash dividend payments, if any, shall be declared by our board of directors in Renminbi and paid in HK dollars. The depositary will convert the HK dollar dividend payments and distribute them to holders of ADSs in US dollars, less expenses of conversion.

The Company may distribute dividends in the following forms: cash, shares or other forms provided by laws, administrative rules, regulations of competent authorities and regulatory provisions in the place where the Company's shares are listed. The Company shall give priority to the distribution of dividends in cash. The Company may make interim dividends distribution. The Company shall distribute cash dividends when the Company's net profit and retained earnings, in separate financial statement, are positive and the Company has adequate cash inflows over the requirements of cash outflows of operation and sustainable development. The cash dividends per annum should not be less than thirty (30) percent of the net profit of the Company in the current year. Dividends in the form of shares will be distributed to the depositary and, except as otherwise described in the Deposit Agreement, will be distributed by the depositary in the form of additional ADSs, to holders of ADSs.

At the seventeenth meeting of the sixth session of our board, our board approved the proposal to distribute a final cash dividend of RMB 0.40 (including tax) per share, combining with an interim distributed dividend of RMB 0.10 (including tax) per share, the total dividend for 2017 is RMB 0.50 (including tax) per share. The proposal is subject to the shareholder's approval at the annual general meeting.

#### **B. SIGNIFICANT CHANGES**

None

#### ITEM 9. THE OFFER AND LISTING

#### A. OFFER AND LISTING DETAILS

Not applicable, except for Item 9A(4) and Item 9C.

Our H Shares have been listed on the Hong Kong Stock Exchange (Code: 0386), and our ADSs, each representing 100 H Shares, have been listed on the New York Stock Exchange and the London Stock Exchange under the symbol "SNP", since we completed our initial public offering on October 19, 2000. Prior to that time, there was no public market for our H Shares. The Hong Kong Stock Exchange is the principal non-U.S. trading market for our H Shares. Our publicly traded domestic shares, or A shares, are listed on the Stock Exchange of Shanghai since August 8, 2001 (Code: 600028).

On 14 February 2013, we issued 2,845,234,000 listed H shares with a par value of RMB 1.00 each at the price of HKD 8.45 per share. The aggregate gross proceeds from the placing amounted to approximately HKD 24.0 billion.

On January 26, 2015, the conditional redemption of the 2011 convertible bonds amounting to RMB 27 billion, was triggered. As of February 11, 2015 (the redemption registration date), the cumulative conversion of the 2011 convertible bonds to listed A shares is 4,623,769,047 shares, and the balance of registered 2011 convertible bonds is RMB 52,766,000. On February 17, 2015, we redeemed the balance plus interests payable at the aggregate amount of RMB 53,348,948.28. The 2011 convertible bonds were delisted from the Shanghai Stock Exchange.

The following table sets forth, for the periods indicated, the high and low closing prices per H Share, as reported on the Stock Exchange of Hong Kong, per ADS, as reported on the New York Stock Exchange and per A share, as reported on the Stock Exchange of Shanghai.

|                         |                | The Stock Exchange of<br>Hong Kong |            | The New York<br>Stock Exchange |         | Stock Exc  | The Shanghai<br>Stock Exchange |  |
|-------------------------|----------------|------------------------------------|------------|--------------------------------|---------|------------|--------------------------------|--|
| Period                  |                | High                               | Low        | High                           | Low     | High       | Low                            |  |
| April 2018 (as of April | 17, 2018)      | 7.43                               | 7.02       | 96.05                          | 86.62   | 6.94       | 6.38                           |  |
|                         |                | (HK dollar pe                      | r H share) | (US dollar p                   | er ADS) | (RMB per A | A share)                       |  |
| Past 6 months           |                | ` •                                | ,          | ` .                            | ,       | ` .        | ,                              |  |
| 2018                    | March          |                                    |            |                                |         |            |                                |  |
| 2018                    | February       | 6.97                               | 5.99       | 88.46                          | 74.98   | 7.63       | 6.30                           |  |
| 2018                    | January        | 7.00                               | 5.73       | 89.68                          | 75.14   | 7.44       | 6.13                           |  |
| 2017                    | December       | 5.77                               | 5.45       | 74.06                          | 69.82   | 6.18       | 5.93                           |  |
| 2017                    | November       | 5.94                               | 5.44       | 76.66                          | 70.00   | 6.29       | 5.89                           |  |
| 2017                    | October        | 5.85                               | 5.63       | 75.88                          | 72.45   | 5.99       | 5.81                           |  |
|                         |                |                                    |            |                                |         |            |                                |  |
| Quarterly Data          |                |                                    |            |                                |         |            |                                |  |
| 2018                    | First Quarter  |                                    |            |                                |         |            |                                |  |
| 2017                    | Fourth Quarter | 5.94                               | 5.44       | 76.66                          | 69.82   | 6.29       | 5.81                           |  |
|                         | Third Quarter  | 6.12                               | 5.60       | 80.06                          | 72.05   | 6.32       | 5.83                           |  |
|                         | Second Quarter | 6.55                               | 6.02       | 84.50                          | 78.16   | 6.33       | 5.64                           |  |
|                         | First Quarter  | 6.36                               | 5.50       | 82.42                          | 71.02   | 6.06       | 5.41                           |  |
| 2016                    | Fourth Quarter | 5.95                               | 5.27       | 77.47                          | 68.12   | 5.67       | 4.86                           |  |
|                         | Third Quarter  | 5.84                               | 5.28       | 75.21                          | 68.10   | 5.02       | 4.70                           |  |
|                         | Second Quarter | 5.65                               | 4.93       | 73.06                          | 62.99   | 5.08       | 4.60                           |  |
|                         | First Quarter  | 5.09                               | 3.88       | 65.15                          | 49.82   | 4.96       | 4.27                           |  |
|                         |                |                                    |            |                                |         |            |                                |  |
| Annual Data             |                |                                    |            |                                |         |            |                                |  |
| 2017                    |                | 6.55                               | 5.44       | 84.50                          | 69.82   | 6.33       | 5.41                           |  |
| 2016                    |                | 5.95                               | 3.88       | 77.47                          | 49.82   | 5.67       | 4.27                           |  |
| 2015                    |                | 7.63                               | 4.35       | 96.41                          | 55.73   | 8.67       | 4.49                           |  |
| 2014                    |                | 8.18                               | 5.74       | 105.28                         | 74.53   | 6.56       | 4.38                           |  |
| 2013                    |                | 7.26                               | 5.08       | 94.36                          | 65.95   | 5.94       | 4.10                           |  |

Source: Bloomberg

# ITEM 10. ADDITIONAL INFORMATION

# A. SHARE CAPITAL

Not applicable.

# B. MEMORANDUM AND ARTICLES OF ASSOCIATION

In 2017, we amended the articles of association and rules and procedures for the board meetings. With the amendments, corporate governance mechanism in scientific decision-making, efficient implementation and supervision was promoted. When making decisions on significant matters such as directions for reform and development, key targets and projects arrangements, and nominations and employment of executives of the Company, the Board would seek advice from the Party organisation, which further strengthened the Company's democratic and scientific decision-making process. In respect of resolutions made by the Board, the Party organisations motivate party members to actively play an exemplary and leading role on implementations based on their responsibilities and inspires the initiative and enthusiasm of employees, which has helped the effective implementation of the Board's decisions by the management. In addition, the Party organisations have strengthened the supervision and accountability on anti-corruption and self-discipline of the Party members which promote the clean governance and risk-management level.

The following is a summary of certain provisions of our articles of association and its appendices, as amended, the Company Law of the PRC (2006) and certain other applicable laws and regulations of the PRC. You and your advisors should refer to the text of our articles of association, as amended, and to the texts of applicable laws and regulations for further information.

#### **Objects and Purposes**

We are a joint stock limited company established in accordance with the Company Law and certain other laws and regulations of the PRC. We are registered with the PRC State Administration of Industry and Commerce with business license number 10000000032985. Article 12 of our articles of association provides that our scope of businesses includes, among other things, the production, storage, pipeline transportation, land transportation, water transportation and sale of non-coal mines (oil and natural gas etc.), dangerous chemicals (ethylene, propylene, butadiene and naphtha etc.), heavy oil, rubber and other chemical raw materials and products; oil refining; wholesaling and retailing (for subsidiaries only) of gasoline, kerosene and diesel oil; the production, storage, transportation and sale of natural gas chemicals and coal chemicals; sale of lubricant, fuel oil, solvent naphtha and asphalt; production of chemical fertilizer; operation of LPG station, sale of CNG, LNG, LPG and city gas; operation of electrical vehicle charging station; production, supervision of manufacturing, installation of oil and petrochemical machinery and equipment; manufacturing of equipment, tools, instruments and gauges in petroleum drilling and production; purchase and sale of oil and petrochemical raw and auxiliary materials, equipment and parts; technology and information, research, development, application and consultation of alternative energy products; production and sale of electricity, steam, water and industrial gases; wholesaling of farm, forestry and pasture products; operation of general merchandise convenience stores; wholesaling and retailing of knitted garments and housewares; wholesaling and retailing of cultural and sports goods and equipment; sale of food, beverages and tobacco products; wholesaling and retailing of pharmaceuticals and medical devices; retailing of automobiles, motorcycles and components; repair and maintenance of and technical training for automobiles and motorcycles; wholesaling and retailing of machineries, hardware products, electronic products and household appliances; retailing of furniture and materials for indoor decoration; stalls, no-store sale and other forms of retail business; general merchandise retail; accommodation and catering services; manufacturing of food and food additives; residents' services; transportation agency services; warehousing; operation of self-owned properties; leasing of natural gas storage facility; leasing of houses, working places, vehicles and equipment; lease of machineries; media, advertising and acting as commission agent; insurance brokerage and agency services; financial trust and management services; E-commerce; self-operation of and acting as agency for the import and export of various commodities and technologies other than those restricted or prohibited by the state from import and export; contractor of overseas mechanical, electronics, petrochemical projects and domestic international bid-inviting projects; export of equipment and materials required for the aforementioned overseas projects; dispatch of labor required for the aforementioned overseas projects.

#### Directors

Our directors shall be elected at our shareholders' general meeting. Cumulative voting shall be adopted for the election of directors if a controlling shareholder controls 30% or more of our shares. Details of the cumulative voting mechanism are set forth in Article 59 of the Rules and Procedures for the Shareholders' General Meetings that is an appendix to, and forms an integral part of, our articles of association. Our directors shall be elected for a term of three years and may serve consecutive terms upon re-election, except that independent directors may only serve a maximum of two terms. Our directors are not required to hold any shares in us, and there is no age limit requirement for the retirement or non-retirement of our directors.

Where a director is materially interested, directly or indirectly, in a contract, transaction or arrangement (including any proposed contract, transaction or arrangement) with us, he or she shall declare the nature and extent of his or her interests to the board of directors at the earliest opportunity, whether or not such contract, transaction or arrangement is otherwise subject to the approval of the board. A director shall not vote, and shall not be counted in the quorum of the meeting, on any resolution concerning any contract, transaction or arrangement where the director owns material rights or interests therein. A director is deemed to be interested in a contract, transaction or arrangement in which his associate (as defined by the Listing Rule of the Hong Kong Stock Exchange) is interested.

Unless the interested director discloses his interests to the board and the contract, transaction or arrangement in which the director is materially interested is approved by the board at a meeting in which the director neither votes nor is not counted in the quorum, such contract, transaction or arrangement shall be voidable by us except with respect to a bona fide party thereto who does not have notice of the director's interests.

We are prohibited from making loans or providing guarantees to our directors and their associates except where such loan or guarantee is to meet expenditure requirement incurred or to be incurred by the director for the purposes of the company or for the purpose of enabling the director to perform his or her duties properly in accordance with the terms of a service contract approved by the shareholders in a general meeting.

The board of directors shall examine and approve the amount of the long-term loans for the current year according to the annual investment plan as approved by the shareholders' general meeting. The chairman of the board of directors is authorized to make adjustments of no more than 10% of the total amount of the long-term loans as approved by the board of directors for the current year. Within the total amount of the long-term loans as approved by the board of directors, the chairman of the board of directors is authorized to approve and execute individual long-term loan agreement with the loan amount exceeding RMB 1 billion, and the president is authorized to approve and execute individual long-term loan agreement with the loan amount not exceeding RMB 1 billion. Within the total amount of the working capital loans for the current year as approved by the board of directors, the chairman of the board of directors is authorized to execute the overall short-term loan facility agreement for raising working capitals as we need.

Matters relating to the remuneration of our directors shall be determined by the shareholders' general meeting.

#### **Dividends**

A distribution of final dividends for any financial year is subject to shareholders' approval. Except as otherwise decided by Shareholders' meeting, the board of directors may make decision on the distribution of interim dividends. Except as otherwise provided by laws and regulations, the sum of interim dividends shall not exceed 50 percent of the net profit for the half year interim period. Dividends may be distributed in the forms of cash, shares or other forms provided by laws, administrative rules or regulations of competent authorities and regulatory provisions in the place where the Company's shares are listed. The Company shall give priority to the distribution of dividends in cash. A distribution of shares, however, must be approved by special resolution of the shareholders

Dividends may only be distributed after allowance has been made for:

- recovery of losses, if any;
- allocations to the statutory surplus reserve fund; and
- allocations to a discretionary surplus reserve fund if approved by the shareholders.

The allocations to the statutory surplus reserve fund shall be 10% of our after-tax profits of the current year determined in accordance with ASBE. In the event that the statutory surplus reserve balance reaches fifty (50) percent of the registered capital of the Company, no allocation is needed.

The articles of association require us to appoint on behalf of the holders of H shares a receiving agent which is registered as a trust corporation under the Trustee Ordinance of Hong Kong to receive dividends declared by us in respect of the H shares on behalf of such shareholders. The articles of association require that cash dividends in respect of H shares be declared in Renminbi and paid by us in HK dollars. The depositary of our ADSs will convert such proceeds into U.S. dollars and will remit such converted proceeds to our holders of ADSs. If we record no profit for the year, we may not normally distribute dividends for the year.

Dividend payments may be subject to PRC withholding tax.

## Voting Rights and Shareholders' Meetings

Our board of directors shall convene a shareholders' annual general meeting once every year and within six months from the end of the preceding financial year. Our board shall convene an extraordinary general meeting within two months of the occurrence of any one of the following events:

- where the number of directors is less than the number stipulated in the PRC Company Law or two-thirds of the number specified in our articles of association;
- where our unrecovered losses reach one-third of the total amount of our actually paid-in share capital;
- where shareholder(s) holding 10% or more of our issued and outstanding voting shares request(s) in writing the convening of an extraordinary general meeting;
- whenever our board deems necessary or our board of supervisors so requests; or
- circumstances provided in the articles of association.

Meetings of a special class of shareholders must be called in certain enumerated situations when the rights of the holders of such class of shares may be modified or adversely affected as discussed below. Proposals made by the board of directors, the board of supervisors or shareholder(s) holding 3% or more of the total number of voting shares shall be included in the agenda for the relevant general meeting if they are matters which fall within the scope of the functions and powers of shareholders in general meeting. Shareholder(s) holding 3% or more of the total shares of the Company may put forward interim motions by written proposals to the convener 10 days before the shareholders' general meeting. The convener shall publish supplementary notice to announce the interim motion within two days upon receiving.

All shareholders' meetings must be convened by our board of directors by written notice given to shareholders no less than 45 days before the meeting, by our board of supervisors or certain qualified shareholders in case a shareholders' meeting is not convened by our board of directors and board of supervisors. Shareholder(s) holding 10% or more the total number of shares of the Company have the right to convene and chair the interim shareholders' general meeting or class shareholders' meeting in accordance with the provisions in laws, administrative rules and the articles of association, in the event that the board of directors and the board of supervisors fail to convene and chair such meeting upon demand made by such shareholders. Based on the written replies received by us 20 days before a shareholders' meeting, we shall calculate the number of voting shares represented by shareholders who have indicated that they intend to attend the meeting. Where the number of voting shares represented by those shareholders amount to more than one-half of our total voting shares, we may convene the shareholders' general meeting (regardless of the number of shareholders who actually attend). Otherwise, we shall, within five days, inform the shareholders again of the motions to be considered and the date and venue of the meeting by way of public announcement. After the announcement is made, the shareholders' meeting may be convened. The accidental omission by us to give notice of a meeting to, or the non-receipt of notice of a meeting by, a shareholder will not invalidate the proceedings at that shareholders' meeting.

Shareholders at meetings have the power, among other things, to approve or reject our profit distribution plans, annual budget, financial statements, increase or decrease in share capital, issuance of debentures, merger or liquidation and any amendment to our articles of association. Shareholders of the shares which the Company issues to foreign investors for subscription in foreign currencies possess the same rights and undertake the same obligations as those of the shares which the Company issues to domestic investors for subscription in Renminbi. In addition, the rights of a class of shareholders may not be modified or abrogated, unless approved by a special resolution of all shareholders at a general shareholders' meeting and by a special resolution of shareholders of that class of shares at a separate meeting. Our articles of association enumerate, without limitation, certain amendments which would be deemed to be a modification or abrogation of the rights of a class of shareholders, including increasing or decreasing the number of shares of a class disproportionate to increases or decreases of other classes of shares, removing or reducing rights to receive dividends in a particular currency or creating shares with voting or equity rights superior to shares of such class.

Cumulative voting in accordance with the relevant laws and regulations in effect is adopted for the election of directors and supervisors. For all other matters, each share is entitled to one vote on all such matters submitted to a vote of our shareholders at all shareholders' meetings, except for meetings of a special class of shareholders where only holders of shares of the affected class are entitled to vote on the basis of one vote per share of the affected class.

Shareholders are entitled to attend and vote at meetings either in person or by proxy. Proxies must be in writing and deposited at our legal address, or such other place as is specified in the meeting notice, no less than 24 hours before the time for holding the meeting at which the proxy proposes to vote or the time appointed for the passing of the relevant resolution(s). When the instrument appointing a proxy is executed by the shareholder's attorney-in-fact, such proxy when deposited must be accompanied by a notary certified copy of the relevant power of attorney or other authority under which the proxy was executed.

Except for those actions discussed below which require supermajority votes (special resolutions), resolutions of the shareholders are passed by a simple majority of the voting shares held by shareholders who are present in person or by proxy. Special resolutions must be passed by or more than two-thirds of the voting rights represented held by shareholders who are present in person or by proxy.

The following decisions must be adopted by special resolution:

- an increase or reduction of our share capital or the issue of shares, including stock distributions, of any class, warrants and other similar securities;
- issuance of debentures;
- our division, merger, dissolution and liquidation; (Shareholders who object to a proposed division or merger are entitled to demand that either we or the shareholders who approved the merger purchase their shares at a fair price.)
- amendments to our articles of association and its appendices;
- change of our company form;
- acquisition or disposal of material assets or provision of material guarantee within one year, with the value exceeding 30% of our latest audited total assets;
- any stock incentive plan;
- any other matters required by laws and regulations or our articles of association and its appendices or considered by the shareholders in a general meeting and which they have resolved by way of an ordinary resolution to be of a nature which may have a material impact on us and should be adopted by special resolution.

All other actions taken by the shareholders, including the appointment and removal of our directors and supervisors and the declaration of cash dividend payments, will be decided by an ordinary resolution of the shareholders. The listing agreement between us and the Hong Kong Stock Exchange (Listing Agreement) provided that we may not permit amendments to certain sections of the articles of association which have been mandated by the Hong Kong Stock Exchange. These sections include provisions relating to:

- varying the rights of existing classes of shares;
- voting rights;
- our power to purchase our own shares;
- rights of non-controlling shareholders; and
- procedure on liquidation.

In addition, certain amendments to the articles of association require the approval and consent of the relevant PRC authorities

Any shareholder resolution which is in violation of any laws or administrative regulations of the PRC will be null and void subject to statutory procedures.

#### **Liquidation Rights**

In the event of our liquidation, the H shares will rank pari passu with the domestic ordinary shares, and payment of debts out of our remaining assets shall be made in the order of priority prescribed by applicable laws and regulations or, if no such standards exist, in accordance with such procedure as the liquidation committee which has been appointed either by us or the People's Court of the PRC may consider to be fair and reasonable. After payment of debts, we shall distribute the remaining property to shareholders according to the class and proportion of their shareholders.

#### **Further Capital Call**

Shareholders are not liable to make any further contribution to the share capital other than according to the terms, which were agreed by the subscriber of the relevant shares at the time of subscription.

# **Increases in Share Capital and Preemptive Rights**

The articles of association require the approval by a special resolution of the shareholders and by special resolution of holders of domestic ordinary shares and overseas-listed foreign invested shares at separate shareholder class meetings be obtained prior to authorizing, allotting, issuing or granting shares, securities convertible into shares or options, warrants or similar rights to subscribe for any shares or such convertible securities. No such approval is required if, but only to the extent that:

- we issue domestic ordinary shares and/or overseas-listed foreign-invested shares, either separately or concurrently, in numbers not exceeding 20% of the number of domestic ordinary shares and overseas-listed foreign-invested shares then in issue, respectively, in any 12-month period, as approved by a special resolution of the shareholders; or
- if our plans for issuing domestic ordinary shares and overseas-listed foreign-invested shares upon our establishment are implemented within fifteen months of the date of approval by the China Securities Regulatory Commission.

New issues of shares must also be approved by the relevant PRC authorities.

#### Reduction of Share Capital and Purchase by Us of Our Shares and General Mandate to Repurchase Shares

We may reduce our registered share capital only upon obtaining the approval of the shareholders by a special resolution and, in certain circumstances, of relevant PRC authorities. The number of H shares, which may be purchased is subject to the Hong Kong Takeovers and Share Repurchase Codes.

# Restrictions on Large or Controlling Shareholders

Our articles of association provide that, in addition to any obligation imposed by laws and administration regulations or required by the listing rules of the stock exchanges on which our H shares are listed, a controlling shareholder shall not exercise his voting rights in a manner prejudicial to the interests of the shareholders generally or of some part of the shareholders:

• to relieve a director or supervisor from his or her duty to act honestly in our best interests;

- to approve the expropriation by a director or supervisor (for his or her own benefit or for the benefit of another person) of our assets in any way, including, without limitation, opportunities which may benefit us; or
- to approve the expropriation by a director or supervisor (for his or her own benefit or for the benefit of another person) of the individual rights of other shareholders, including, without limitation, rights to distributions and voting rights (save according to a restructuring of our company which has been submitted for approval by the shareholders in a general meeting in accordance with our articles of association and its appendices).

A controlling shareholder, however, will not be precluded by our articles of association or any laws and administrative regulations or the listing rules of the stock exchanges on which our H shares are listed from voting on these matters.

A controlling shareholder is defined by our articles of association as any person who acting alone or in concert with others:

- is in a position to elect half or more of the board of directors;
- has the power to exercise, or to control the exercise of, 30% or more of our voting rights;
- acting separately or in concert with others, holds 30% or more of our issued and outstanding shares,; or
- acting separately or in concert with others, has de facto control of us in any other way.

As of the date of this annual report, Sinopec Group Company is and will be our only controlling shareholder.

#### Disclosure

The Listing Agreement imposes a requirement on us to keep the Hong Kong Stock Exchange, our shareholders and other holders of our listed securities informed as soon as reasonably practicable of any information relating to us and our subsidiaries, including information on any major new developments which are not public knowledge, which:

- is necessary to enable them and the public to appraise the position of us and our subsidiaries;
- is necessary to avoid the establishment of a false market in its securities; and
- might be reasonably expected materially to affect market activity in and the price of its securities.

There are also requirements under the Listing Rules for us to obtain prior shareholders' approval and/or to disclose to shareholders details of certain acquisitions or disposals of assets and other transactions (including transactions with controlling shareholders).

#### Sources of Shareholders' Rights

The PRC's legal system is based on written statutes and is a system in which decided legal cases have little precedent value. The PRC's legal system is similar to civil law systems in this regard. In 1979, the PRC began the process of developing its legal system by undertaking to promulgate a comprehensive system of laws. In December 1993, the Standing Committee of the 8th National People's Congress adopted the PRC Company Law. On October 27, 2005, the PRC Company law was amended by the Standing Committee of the 10th National People's Congress, and came into force on January 1, 2006. The amended PRC Company Law enhanced the protection of shareholders' rights primarily in the following regards:

• Shareholders holding 10 percent or more of the shares of the Company are entitled to petition the court to dissolve the Company if (i) the Company is in serious operational difficulties; (ii) its continuing existence will seriously prejudice the interests of the shareholders; and (iii) such difficulties cannot be resolved through any other means;

- Shareholders holding 1 percent or more of the shares of the Company for more than 180 consecutive days are entitled to request the board of supervisors (in terms of directors and senior management) or the board of directors (in terms of supervisors) to bring legal proceedings, or bring legal proceedings in their own name on behalf of the Company where it is in emergency and the Company will be subject to irreparable loss if not to do so, against directors, supervisors or senior management who fail to comply with the laws and regulations or the Company's articles of association in the course of performing their duties and cause loss to the Company;
- Shareholders who oppose the Company's decision on merger or separation are entitled to request the Company to repurchase their shares; and
- Shareholders holding 10 percent or more of the voting rights of the Company are entitled to convene a shareholders' meeting.

Currently, the primary sources of shareholder rights are our articles of association, as amended, the PRC Company Law and the Listing Rules of the Hong Kong Stock Exchange, which, among other things, impose certain standards of conduct, fairness and disclosure on us, our directors and our controlling shareholder, i.e., Sinopec Group Company. To facilitate the offering and listing of shares of PRC companies overseas, and to regulate the behavior of companies whose shares are listed overseas, the State Council Securities Committee and the State Commission for Restructuring the Economic System issued on August 27, 1994 the Mandatory Provisions for articles of association of Company Listing Overseas (Mandatory Provisions). These Mandatory Provisions become entrenched in that, once they are incorporated into the articles of association of a PRC company, any amendment to those provisions will only become effective after approval by the SASAC. The Listing Rules require a number of additional provisions to the Mandatory Provisions to be included in the articles of association of PRC companies listing H shares on the Hong Kong Stock Exchange (Additional Provisions). The Mandatory Provisions and the Additional Provisions have been incorporated into our articles of association.

In addition, upon the listing of and for so long as the H shares are listed on the Hong Kong Stock Exchange, we will be subject to those relevant ordinances, rules and regulations applicable to companies listed on the Hong Kong Stock Exchange, including the Listing Rules of the Hong Kong Stock Exchange, the Securities (Disclosure of Interests) Ordinance (SDI Ordinance), the Securities (Insider Dealing) Ordinance and the Hong Kong Codes on Takeovers and Mergers and Share Repurchases (Hong Kong Takeovers and Repurchase Codes).

Unless otherwise specified, all rights, obligations and protections discussed below derive from our articles of association and/or the PRC Company Law.

#### **Enforceability of Shareholders' Rights**

There has not been any public disclosure in relation to the enforcement by holders of H shares of their rights under constitutive documents of joint stock limited companies or the PRC Company Law or in the application or interpretation of the PRC or Hong Kong regulatory provisions applicable to PRC joint stock limited companies.

In most states of the United States, shareholders may sue a corporation "derivatively". A derivative suit involves the commencement by a shareholder of a corporate cause of action against persons (including corporate officers, directors or controlling shareholders) who have allegedly wronged the corporation, where the corporation itself has failed to enforce such claim against such persons directly. Such action is brought based upon a primary right of the corporation, but is asserted by a shareholder on behalf of the corporation. The PRC company law as amended in October 2005 and effective in January 2006 has also granted shareholders with the rights to bring such derivative suits.

Our articles of association provide that all differences or claims, arising from any provision of our articles of association, any right or obligation conferred or imposed by the PRC Company Law or any other relevant law or administrative regulation which concerns our affairs:

- between a holder of overseas-listed foreign-invested shares and us;
- between a holder of overseas-listed foreign-invested shares and any of our directors, supervisors, general managers, deputy general managers or other senior officers; or
- between a holder of overseas-listed foreign-invested shares and a holder of domestic ordinary shares

must be referred to arbitration at either the China International Economic and Trade Arbitration Commission in the PRC or the Hong Kong International Arbitration Center, and the laws of the PRC shall apply, save as otherwise provided in the laws and administrative regulations. Our articles of association provide that such arbitration will be final and conclusive. In June 1999, an arrangement was made between the People's Courts of the PRC and the courts of Hong Kong to mutually enforce arbitration rewards rendered in the PRC and Hong Kong according to their respective laws. This new arrangement was approved by the Supreme Court of the PRC and the Hong Kong Legislative Council and became effective on February 1, 2000. We have provided an undertaking to the United States Securities and Exchange Commission that, at such time, if any, as all applicable laws and regulations of the PRC and (unless our H shares are no longer listed on the Hong Kong Stock Exchange) all applicable regulations of the Stock Exchange of Hong Kong Ltd. shall not prohibit, and to the extent Section 14 under the United States Securities Act of 1933, as amended, so requires, our board of directors shall propose an amendment to the articles of association which would permit shareholders to adjudicate disputes arising between our shareholders and us, our directors, supervisors or officers by means of judicial proceedings.

The holders of H shares will not be able to bring actions on the basis of violations of the Listing Rules and must rely on the Hong Kong Stock Exchange to enforce its rules. The SDI Ordinance establishes certain obligations in relation to disclosure of shareholder interests in Hong Kong listed companies, the violation of which is subject to prosecution by the Securities and Futures Commission of Hong Kong. The Hong Kong Takeovers and Repurchase Codes do not have the force of law and are only standards of commercial conduct considered acceptable for takeover and merger transactions and share repurchases in Hong Kong as established by the Securities and Futures Commission and the securities and futures industry in Hong Kong.

We have appointed our representative office, located at 515 Madison Avenue, Suite 27 West, New York, NY 10022, USA, as our agent to receive service of process with respect to any action brought against us in certain courts in New York under the United States federal and New York State's securities laws. However, as the PRC does not have treaties providing for the reciprocal recognition and enforcement of judgments of courts within the United States, the United Kingdom, Japan or most other the Organization for Economic Cooperation and Development countries, administrative actions brought by regulatory authorities, such as the Commission, and other actions which result in foreign court judgments, could (assuming such actions are not required by PRC law and the articles of association to be arbitrated) only be enforced in the PRC on a reciprocal basis or according to relevant international treaty to which China is a party if such judgments or rulings do not violate the basic principles of the law of the PRC or the sovereignty, security and public interest of the society of the PRC, as determined by a People's Court of the PRC which has the jurisdiction for recognition and enforcement of judgments. We have been advised by our PRC counsel, Haiwen & Partners, that there is certain doubt as to the enforceability in the PRC of actions to enforce judgments of United States courts arising out of or based on the ownership of H shares or ADSs, including judgments arising out of or based on the civil liability provisions of United States federal or state securities laws.

#### Restrictions on Transferability and the Share Register

As provided in the articles of associations we may refuse to register a transfer of H shares unless:

- any relevant transfer fee is paid;
- the instrument of transfer is only related to H shares listed in Hong Kong;
- the instrument of transfer is accompanied by the share certificates to which it relates, or such other evidence is given as may be reasonably necessary to show the right of the transferor to make the transfer;

- the stamp duty which is chargeable on the instrument of transfer has already been paid;
- if it is intended that the shares be transferred to joint owners, the maximum number of joint owners shall not be more than four (4); and
- the Company does not have any lien on the relevant shares.

We are required to keep a register of our shareholders which shall be comprised of various parts, including one part which is to be maintained in Hong Kong in relation to H shares to be listed on the Hong Kong Stock Exchange. Shareholders have the right to inspect and, for a nominal charge, to copy the share register. No transfers of ordinary shares shall be recorded in our share register within 30 days prior to the date of a shareholders' general meeting or within 5 days prior to the record date established for the purpose of distributing a dividend.

We have appointed HKSCC Registrars Limited to act as the registrar of our H shares. This registrar maintains our register of holders of H shares at our offices in Hong Kong and enters transfers of shares in such register upon the presentation of the documents described above.

#### C. MATERIAL CONTRACTS

We have not entered into any material contracts other than in the ordinary course of business and other than those described under "Item 4. Information on the Company", "Item 7 - Major Shareholders and Related Party Transactions" or elsewhere in this Form 20-F.

#### D. EXCHANGE CONTROLS

The existing foreign exchange regulations have significantly reduced government foreign exchange controls for transactions under the current account, including trade and service related foreign exchange transactions and payment of dividends. We may undertake current account foreign exchange transactions without prior approval from the State Administration of Foreign Exchange by producing commercial documents evidencing such transactions, provided that they are processed through Chinese banks licensed to engage in foreign exchange transactions. The PRC government has stated publicly that it intends to make the Renminbi freely convertible in the future. However, we cannot predict whether the PRC government will continue its existing foreign exchange policy and when the PRC government will allow free conversion of Renminbi to foreign currency.

Foreign exchange transactions under the capital account, including principal payments in respect of foreign currency-denominated obligations, continue to be subject to significant foreign exchange controls and require the approval of the State Administration of Foreign Exchange. These limitations could affect our ability to obtain foreign exchange through debt or equity financing, or to obtain foreign exchange for capital expenditures.

The exchange rate of the Renminbi against the U.S. dollar and other foreign currencies fluctuates and is affected by, among other things, the changes in the PRC's and international political and economic conditions. The PRC government has been gradually promoting the reform of exchange rate regime and enhance the flexibility of Renminbi exchange rate. On August 11, 2015, the PBOC decided to further improve the mechanism of RMB's central parity rate against the US dollar. Any fluctuation of exchange rate of the Renminbi against US dollars and Hong Kong dollars may have an effect on our revenues and financial condition, and the value of, and any dividends payable on, our ADSs in foreign currency terms. We cannot assure you that the fluctuation of exchange rate of the Renminbi against US dollars or other foreign currencies would not have a material and adverse effect on our operation and financial condition in the future. Information relating to the exchange risk, exchange rate and hedging activities is presented in "Item 11. Qualitative and Quantitative Disclosures about Market risk — Foreign Exchange Rate Risk".

# E. TAXATION

#### **PRC Taxation**

The following discussion addresses the principal PRC tax consequences of investing in the H shares or ADSs.

#### Taxation of Dividends

#### Individual Investors

According to the PRC Individual Income Tax Law, as amended, dividends paid by Chinese companies are ordinarily subject to a Chinese withholding tax levied at a flat rate of 20%. For a foreign individual who has no domicile and does not stay in the territory of China or who has no domicile but has stayed in the territory of China for less than one year, the receipt of dividends from a company in China is normally subject to a withholding tax of 20% unless reduced or exempted by an applicable tax treaties.

#### Foreign Enterprises

In accordance with the new Enterprise Income Tax Law and its implementation rules that became effective on January 1, 2008 and amended on February 24, 2017, dividends derived from the revenues accumulated from January 1, 2008 and are paid to non-resident enterprises, which are established under the laws of non-PRC jurisdictions and have no establishment or place of business in China or whose dividends from China do not relate to their establishment or place of business in China, are generally subject to a PRC withholding tax levied at a rate of 10% unless exempted or reduced pursuant to an applicable double-taxation treaty or other exemptions. Dividends paid by PRC companies to resident enterprises, including enterprises established under the laws of non-PRC jurisdictions but whose "de facto management body" is located in the PRC, are not subject to any PRC withholding tax, unless the investment income are derived from the publicly traded shares which have been held continuously by the resident enterprises for less than twelve months. Dividends, bonuses and other return based on equity investment that a non-resident enterprise with establishment or place of business in China receives from a resident enterprise and that have actual connection with such establishment or place of business are also exempted from any PRC withholding tax, except for investment income derived from the publicly traded shares which have been held continuously by the resident enterprises for less than 12 months. Chinese resident enterprises are required to withhold PRC enterprise income tax at the rate of 10% on dividends paid for 2009 and later years' earnings payable to their respective H Shares holders that are "non-resident enterprises," except for those holders whose dividend income is not subject to PRC enterprise income tax pursuant to PRC governmental approval.

#### Tax Treaties

Holders resident in countries which have entered into avoidance of double taxation treaties or arrangements with the PRC may be entitled to a reduction or exemption of the withholding tax imposed on the payment of dividends.

Under a tax treaty between United States and China, China may tax dividends paid by Sinopec Corp. to eligible US Holders up to a maximum of 10% of the gross amount of such dividend. Under the tax treaty, an eligible US Holder is a person who, by reason of domicile, residence, place of head office, place of incorporation or any other criterion of similar nature is liable to tax in the United States, subject to a detailed "treaty shopping" provision.

#### Taxation of Capital Gains

In accordance with the new Enterprise Income Tax Law effective from January 1, 2008 and amended on January 8, 2011, and its implementation rules, capital gains realized by foreign enterprises which are non-resident enterprises in China upon the sale of overseas-listed shares are generally subject to a PRC withholding tax levied at a rate of 10%, unless exempted or reduced pursuant to an applicable double-taxation treaty or other exemptions. The capital gains realized by resident enterprises, including enterprises established under the laws of non-PRC jurisdictions but whose "de facto management body" is located in the PRC, upon the sales of overseas-listed shares are subject to the PRC enterprise income tax.

## PRC Stamp Tax Considerations

Under the Provisional Regulations of The People's Republic of China Concerning Stamp Tax, which was effective on October 1, 1988 and amended in January 2011, PRC stamp tax should not be imposed on the transfer of shares of H Shares or ADSs of PRC publicly traded companies.

#### **United States Federal Income Tax Considerations**

The following is a summary of United States federal income tax considerations relating to the ownership and disposition of our H shares or ADSs by a US Holder (as defined below). This summary is based upon existing United States federal income tax law, which is subject to differing interpretations or change, possibly with retroactive effect. This summary does not discuss all aspects of United States federal income taxation which may be important to particular investors in light of their individual investment circumstances, such as certain investors subject to special tax rules including: financial institutions, regulated investment companies, real estate investment trusts, broker-dealers, cooperatives, pension plans, insurance companies, traders in securities that elect mark-tomarket treatment, partnerships and their partners, tax-exempt organizations (including private foundations), non-US Holders, holders who own (directly, indirectly, or constructively) 10% or more of our stock, investors that hold H shares or ADSs as part of a straddle, hedge, conversion, constructive sale, or other integrated transaction for United States federal income tax purposes, holders who acquired their H shares or ADSs pursuant to any employee share option or otherwise as compensation, or US Holders that have a functional currency other than the United States dollar, all of whom may be subject to tax rules that differ significantly from those summarized below. In addition, this summary does not discuss any state, local, non-United States, alternative minimum tax, nonincome tax (such as the U.S. federal estate and gift tax) or Medicare considerations. This summary assumes that our H shares or ADSs held by investors are "capital assets" (generally, property held for investment) under the United States Internal Revenue Code of 1986, as amended (Code). US Holders should consult their tax advisors regarding the United States federal, state, local, and non-United States income and other tax considerations relating to their ownership or disposition of our H shares or ADSs.

For purposes of this summary, a US Holder is a beneficial owner of H shares or ADSs that is, for United States federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation created in or organized under the laws of, the United States or any State thereof or the District of Columbia:
- an estate the income of which is includible in gross income for United States federal income tax purposes regardless of its source; or
- a trust (a) the administration of which is subject to the primary supervision of a United States court and which has one or more United States persons who have the authority to control all substantial decisions of the trust or (b) a trust that has otherwise elected to be treated as a United States person under the Code.

If a partnership (including any entity treated as a partnership for United States federal income tax purposes) is a beneficial owner of H shares or ADSs, the tax treatment of a partner in such partnership will depend upon the status of the partner and the activities of the partnership. Partners in a partnership holding our H shares or ADSs should consult their tax advisors regarding the United States federal income tax considerations relating to the investment in our H shares or ADSs.

For United States federal income tax purposes, it is generally expected that US Holders of ADSs will be treated as the beneficial owners of the underlying H shares represented by the ADSs. The remainder of this discussion assumes that a holder of ADSs will be treated in this manner. Accordingly, deposits or withdrawals of H shares for ADSs will generally not be subject to United States federal income tax.

# Passive Foreign Investment Company Considerations

A non-United States corporation, such as our company, will be a "passive foreign investment company" (PFIC), for United States federal income tax purposes for any taxable year, if either (a) 75% or more of its gross income for such year consists of certain types of "passive" income or (b) 50% or more of its average quarterly assets as determined on the basis of fair market value during such year produce or are held for the production of passive income. For this purpose, cash and assets readily convertible into cash are categorized as passive assets and the Company's goodwill and other unbooked intangibles associated with active business activities may generally be classified as active assets. We will be treated as owning a proportionate share of the assets and earning a proportionate share of the income of any other corporation in which we own, directly or indirectly, more than 25% (by value) of the stock.

We do not believe that we were classified as a PFIC for the taxable year ended December 31, 2017 and we do not expect to be classified as a PFIC for the foreseeable future. The determination of whether we will be or become a PFIC will depend, in part, upon the composition of our income and our assets (which are subject to change from year to year) and the market price of our H shares or ADSs (of which we cannot control). Although we do not expect that our business plans will change in a manner that will affect our PFIC status, no assurance can be given in this regard. Because there are uncertainties in the application of the relevant rules and PFIC status is a fact-intensive determination made on an annual basis, no assurance can be given that we will not be classified as a PFIC for any taxable year.

The discussion below under "Dividends" and "Sale or Other Disposition" of H shares or ADSs assumes that we will not be classified as a PFIC for United States federal income tax purposes. See the discussion below under the heading "Passive Foreign Investment Company Rules" for a brief summary of the PFIC rules.

#### Dividends

The gross amount of any cash distributions (including the amount of any tax withheld) paid on our H shares or ADSs out of our current or accumulated earnings and profits, as determined under United States federal income tax principles, will be subject to tax as dividend income on the day actually or constructively received by a US Holder, in the case of H shares, or by the depositary bank, in the case of ADSs. Because we do not intend to determine our earnings and profits on the basis of United States federal income tax principles, any distribution paid will generally be reported as a "dividend" for United States federal income tax purposes. A non-corporate recipient of dividend income will generally be subject to tax on dividend income from a "qualified foreign corporation" at a reduced capital gains rate rather than the marginal tax rates generally applicable to ordinary income provided that the holding period requirement is met.

A non-U.S. corporation (other than a corporation that is classified as a PFIC for the taxable year in which the dividend is paid or the preceding taxable year) generally will be considered to be a qualified foreign corporation (i) if it is eligible for the benefits of a comprehensive tax treaty with the United States which the Secretary of Treasury of the United States determines is satisfactory for purposes of this provision and which includes an exchange of information program or (ii) with respect to any dividend it pays on stock which is readily tradable on an established securities market in the United States. There is currently a tax treaty in effect between the United States and the People's Republic of China (U.S.-PRC Treaty) which the Secretary of Treasury of the United States determined is satisfactory for these purposes and we believe that we are eligible for the benefits of such treaty. Additionally, our ADSs trade on the New York Stock Exchange, an established securities market in the United States. Although we presently believe that we are a qualified foreign corporation for purposes of the reduced tax rate, no assurance can be given that we will continue to be treated as a qualified foreign corporation in the future. US Holders should consult their tax advisors regarding the availability of the reduced tax rate on dividends under their particular circumstances. Dividends received on H shares or ADSs will not be eligible for the dividends received deduction allowed to corporations.

Dividends paid in non-United States currency will be includible in income in a United States dollar amount based on the exchange rate prevailing at the time of receipt of such dividends by the depositary, in the case of ADSs, or by the US Holder, in the case of H shares held directly by such US Holder, regardless of whether the non-United States currency is actually converted into United States dollars at that time. Gain or loss, if any, recognized on a subsequent sale, conversion or other disposition of the non-United States currency will generally be United States source income or loss.

Dividends received on H shares or ADSs will be treated, for United States foreign tax credit purposes, as foreign source income. A US Holder may be eligible, subject to a number of complex limitations, to claim a foreign tax credit in respect of any non-United States withholding taxes imposed on dividends received on H shares or ADSs. US Holders who do not elect to claim a foreign tax credit for foreign income tax withheld may instead claim a deduction, for United States federal income tax purposes, in respect of such withholdings, but only for a year in which the US Holder elects to do so for all creditable foreign income taxes. US Holders should consult their tax advisors regarding the availability of the foreign tax credit under their particular circumstances.

## Sale or Other Disposition of H shares or ADSs

A US Holder will recognize capital gain or loss upon the sale or other disposition of H shares or ADSs in an amount equal to the difference between the amount realized upon the disposition and the US Holder's adjusted tax basis in such H shares or ADSs. Any capital gain or loss will be long-term if the H shares or ADSs have been held for more than one year and will generally be United States source gain or loss for United States foreign tax credit purposes. If any PRC tax were to be imposed on any gain from the disposition of H shares or ADSs, however, a US Holder that is eligible for the benefits of the U.S.- PRC Treaty may elect to treat the gain as non-United States source gain or loss. The deductibility of a capital loss may be subject to limitations. The rules governing the foreign tax credit are complex and their outcome depends in large part on the US Holder's individual facts and circumstances. Accordingly, US Holders should consult their tax advisors regarding the availability of the foreign tax credit under their particular circumstances

US Holders that receive currency other than the United States dollar upon the sale or other disposition of H shares will realize an amount equal to the United States dollar value of the non-United States currency on the date of such sale or other disposition, or if the shares are traded on an established securities market, in the case of cash basis and electing accrual basis taxpayers, the settlement date. US Holders will recognize currency gain or loss if the United States dollar value of the currency received on the settlement date differs from the amount realized. US Holders will have a tax basis in the currency received equal to the United States dollar amount at the spot rate on the settlement date. Generally, any gain or loss realized by US Holders on a subsequent conversion or disposition of such currency will be United States source ordinary income or loss.

#### Passive Foreign Investment Company Rules

If we were to be classified as a PFIC in any taxable year, a special tax regime will apply to both (a) any "excess distribution" by us to a US Holder (generally, the US Holder's ratable portion of distributions in any year which are greater than 125% of the average annual distribution received by such US Holder in the shorter of the three preceding years or the US Holder's holding period for our H shares or ADSs) and (b) any gain realized on the sale or other disposition of the H shares or ADSs. Under this regime, any excess distribution and realized gain will be treated as ordinary income and will be subject to tax as if (a) the excess distribution or gain had been realized ratably over the US Holder's holding period, (b) the amount deemed realized in each year had been subject to tax in each year of that holding period at the highest marginal rate for such year (other than income allocated to the current period or any taxable period before we became a PFIC, which would be subject to tax at the US Holder's regular ordinary income rate for the current year and would not be subject to the interest charge discussed below), and (c) the interest charge generally applicable to underpayments of tax had been imposed on the taxes deemed to have been payable in those years. In addition, dividends made to a US Holder will not qualify for the lower rates of taxation applicable to long-term capital gains discussed above under "Dividends."

If a "mark-to-market" election is available and a US Holder validly makes such an election, notwithstanding the foregoing, such a holder generally will be required to take into account the difference, if any, between the fair market value and its adjusted tax basis in H shares or ADSs at the end of each taxable year as ordinary income or ordinary loss (to the extent of any net mark-to-market gain previously included in income). In addition, any gain from a sale or other disposition of H shares or ADSs will be treated as ordinary income, and any loss will be treated as ordinary loss (to the extent of any net mark-to-market gain previously included in income).

Because a mark-to-market election cannot be made for any lower-tier PFICs that we may own, a US Holder may continue to be subject to the PFIC rules with respect to such US Holder's indirect interest in any investments held by us that are treated as an equity interest in a PFIC for United States federal income tax purposes.

We do not intend to provide information necessary for US Holders to make qualified electing fund elections which, if available, would result in tax treatment different from (and generally less adverse than) the general tax treatment for PFICs described above.

Each US Holder is urged to consult its tax advisor concerning the United States federal income tax consequences of holding and disposing H shares or ADSs if we are or become treated as a PFIC, including the possibility of making a mark-to-market election, the "deemed sale" and "deemed dividend" elections and the unavailability of the election to treat us as a qualified electing fund.

#### Withholding Tax and Information Reporting

Certain US Holders are required to report information relating to an interest in "specified foreign financial assets," including shares issued by a non-United States corporation, for any year in which the aggregate value of all specified foreign financial assets exceeds US\$50,000, subject to certain exceptions (including an exception for ordinary shares held in custodial accounts maintained with a United States financial institution). A US Holder who fails to timely furnish the required information may be subject to a penalty. In addition, information reporting generally will apply to dividends on and proceeds from the sale or other disposition of our H shares or ADSs. US withholding tax is generally inapplicable to dividends on or proceeds from the sale or other disposition of our H shares or ADSs (provided that various certification requirements have been met). US Holders are advised to consult with their tax advisors regarding the application of the United States information reporting and withholding rules.

#### F. DIVIDENDS AND PAYING AGENTS

Not applicable.

#### G. STATEMENT BY EXPERTS

Not applicable.

#### H. DOCUMENTS ON DISPLAY

This annual report contains exhibits and schedules. Any statement in this annual report about any of our contracts or other documents is not necessarily complete. If the contract or document is filed or incorporated by reference as an exhibit to this annual report, the contract or document is deemed to modify the description contained in this annual report. You must review the exhibits themselves for a complete description of the contracts or documents.

Copies of reports and other information, when so filed, may be inspected without charge and may be obtained at prescribed rates at the public reference facilities maintained by the SEC at Judiciary Plaza, 450 Fifth Street, Room 1024, NW, Washington, D.C. 20549; or at New York (address: 233 Broadway, New York, NY 10279) and Chicago (address: Citicorp Center, 500 West Madison Street, Suite 1400, Chicago, Illinois 60661). Copies of the above materials may also be obtained from the Public Information Department of SEC at 450 Fifth Street, NW, Washington DC 20549, charges as appropriate. You may also view the registration statement (including attachments and schedules) at the New York Stock Exchange at Wall Street, New York, NY 10005. The public may obtain information regarding the Washington, D.C. Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains a web site at www.sec.gov. As a foreign private issuer, we are exempt from the rules under the Exchange Act prescribing the furnishing and content of quarterly reports and proxy statements, and officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act.

# I. SUBSIDIARY INFORMATION

Not applicable.

# ITEM 11. QUALITATIVE AND QUANTITATIVE DISCLOSURES ABOUT MARKET RISK

Our primary market risk exposures are to fluctuations in oil and gas prices, exchange rates and interest rates. Please also refer to Note 36 to the consolidated financial statements included elsewhere in this annual report for a detailed discussion of other market risks that we have exposure to.

## **Commodity Price Risk**

The Group engages in oil and gas operations and is exposed to commodity price risk related to price volatility of crude oil, refined oil products and chemical products. The fluctuations in prices of crude oil, refined oil products and chemical products could have significant impact on the Group. The Group uses derivative financial instruments, including commodity futures and swaps, to manage a portion of such risk.

At 31 December 2017, the Group had certain commodity contracts of crude oil, refined oil products and chemical products designated as qualified cash flow hedges and economic hedges. At 31 December 2017, the net fair value of such derivative hedging financial instruments is derivative financial assets of RMB 515 million (2016: RMB 312 million) recognised in other receivables and derivative financial liabilities of RMB 2,624 million (2016: RMB 4,336 million) recognised in other payables.

At 31 December 2017, it is estimated that a general increase/decrease of USD 10 per barrel in basic price of derivative financial instruments, with all other variables held constant, would impact the fair value of derivative financial instruments which would decrease/increase the Group's profit for the year by approximately RMB 4,049 million (2016: decrease/increase RMB 634 million), and decrease/increase the Group's other comprehensive income by approximately RMB 701 million (2016: decrease/increase RMB 4,007 million). This sensitivity analysis has been determined assuming that the change in prices had occurred at the balance sheet date and the change was applied to the Group's derivative financial instruments at that date with exposure to commodity price risk. The analysis is performed on the same basis for 2016.

#### Foreign Exchange Rate Risk

The Renminbi is not a freely convertible currency. With the authorization from the PRC government, the PBOC announced that the PRC government reformed the exchange rate regime by moving into a managed floating exchange rate regime based on market supply and demand with reference to a basket of currencies on July 21, 2005. The PRC government has been gradually promoting the Renminbi exchange rate formation mechanism to enhance the flexibility of Renminbi exchange rate. On August 11, 2015, the PBOC decided to further improve the mechanism of RMB's central parity rate against the US dollar. Actions taken by the PRC government could cause future exchange rates to vary significantly from current or historical exchange rates. Fluctuations in exchange rates may adversely affect the value, translated or converted into US dollars or Hong Kong dollars, of our net assets, earnings and any declared dividends. We cannot give any assurance that any future movements in the exchange rate of the Renminbi against the US dollar and other foreign currencies will not adversely affect our results of operations and financial condition.

The following presents various market risk information regarding market-sensitive financial instruments that we held or issued as of December 31, 2016 and 2017. We conduct our business primarily in Renminbi, which is also our functional and reporting currency.

The following tables provide information regarding instruments that are sensitive to foreign exchange rates as of December 31, 2016 and 2017. For debt obligations, the table presents cash flows and related weighted average rates by expected maturity dates.

|                                      | As of December 31, 2017 |       |                |                |               |             |                |            |
|--------------------------------------|-------------------------|-------|----------------|----------------|---------------|-------------|----------------|------------|
|                                      |                         |       | Expected Matur | rity Date      |               |             | Total carrying |            |
|                                      | 2018                    | 2019  | 2020           | 2021           | 2022          | Thereafter  | amount         | Fair value |
|                                      |                         |       | (RMB equivaler | nt in millions | , except inte | erest rate) |                |            |
| Assets                               |                         |       |                |                |               |             |                |            |
| Cash and cash equivalent             |                         |       |                |                |               |             |                |            |
| In US Dollar                         | 11,260                  | _     | _              | _              | _             | <u>—</u>    | 11,260         | 11,260     |
| In HK Dollar                         | 87                      | _     |                |                |               |             | 87             | 87         |
| In Japanese Yen                      | 13                      | _     | _              | _              | _             | _           | 13             | 13         |
| In Euro                              | 136                     | _     |                | _              | _             |             | 136            | 136        |
| Others                               | 109                     | _     | _              | _              | _             |             | 109            | 109        |
| Time deposits with financial         |                         |       |                |                |               |             |                |            |
| institutions                         |                         |       |                |                |               |             |                |            |
| In US Dollar                         | 28,557                  | _     | _              | _              | _             | _           | 28,557         | 28,557     |
| Liabilities                          |                         |       |                |                |               |             |                |            |
| Debts in US Dollar                   |                         |       |                |                |               |             |                |            |
| Fixed rate                           | 6,775                   | 54    | 54             | 39             | 13            | 11,379      | 18,314         | 18,333     |
| Average interest rate                | 0.63%                   | 3.03% | 3.03%          | 2.56%          | 1.37%         | 1.11%       | _              |            |
| Variable rate                        | 26,868                  | _     |                | _              | _             |             | 26,868         | 26,868     |
| Average interest rate <sup>(1)</sup> | 1.90%                   | _     | _              | _              | _             |             | _              |            |
| Debts in HK Dollar                   |                         |       |                |                |               |             |                |            |
| Fixed rate                           | 5                       | _     | _              | _              | _             | _           | 5              | 5          |
| Average interest rate                | 1.76%                   | _     |                | _              | _             |             | _              |            |
| Variable rate                        | 1,898                   | _     | _              | _              | _             |             | 1,898          | 1,898      |
| Average interest rate <sup>(1)</sup> | 2.05%                   | _     |                | _              |               |             | _              | _          |
| Debts in Singapore Dollar            |                         |       |                |                |               |             |                |            |
| Fixed rate                           |                         |       |                | _              |               |             |                | _          |
| Average interest rate                | _                       | _     | _              | _              | _             |             | _              |            |
| Variable rate                        | 20                      |       |                |                |               |             | 20             | 20         |
| Average interest rate <sup>(1)</sup> | 1.57%                   | _     | _              |                | _             | <u> </u>    | _              |            |

<sup>(1)</sup> The average interest rates for variable rate debts are calculated based on the rates reported as of December 31, 2017.

|   |          |                        | As            | of December 3    | 31, 2016       |                |        |            |
|---|----------|------------------------|---------------|------------------|----------------|----------------|--------|------------|
|   |          | Expected Maturity Date |               |                  |                | Total carrying |        |            |
|   | 2017     | 2018                   | 2019          | 2020             |                | Thereafter     | amount | Fair value |
|   |          |                        | (RMB equivale | ent in millions, | except interes | st rate)       |        |            |
| Assets                                    |          |                        |               |                  |                |                |        |            |
| Cash and cash equivalent                  |          |                        |               |                  |                |                |        |            |
| In US Dollar                              | 20,745   | _                      | _             | _                |                | <del>-</del>   | 20,745 | 20,745     |
| In HK Dollar                              | 82       | _                      | _             | _                |                |                | 82     | 82         |
| In Japanese Yen                           | 12       | _                      | _             | _                | —              | _              | 12     | 12         |
| In Euro                                   | 41       |                        |               |                  |                |                | 41     | 41         |
| Others                                    | 66       |                        | _             |                  | —              | _              | 66     | 66         |
| Time deposits with financial institutions |          |                        |               |                  |                |                |        |            |
| In US Dollar                              | 7,843    | _                      | _             | _                | _              | _              | 7,843  | 7,843      |
| Liabilities                               | ,        |                        |               |                  |                |                | ,      | ĺ          |
| Debts in US Dollar                        |          |                        |               |                  |                |                |        |            |
| Fixed rate                                | 42       | 6,944                  | 25            | 25               | 283            | 12,091         | 19,410 | 19,289     |
| Average interest rate                     | 1.40%    | 0.94%                  | 1.41%         | 1.41%            | 4.07%          | 1.11%          | Í      | ĺ          |
| Variable rate                             | 14,591   |                        | _             | _                |                |                | 14,591 | 14,584     |
| Average interest rate <sup>(1)</sup>      | 1.40%    | _                      | _             | _                | _              | _              | ,      | ĺ          |
| Debts in HK Dollar                        |          |                        |               |                  |                |                |        |            |
| Fixed rate                                | _        | _                      | _             | _                | _              | _              | _      |            |
| Average interest rate                     | <u>—</u> | _                      | _             | _                |                | <u>—</u>       |        |            |
| Variable rate                             | 1,969    | _                      | _             | _                | _              | _              | 1,969  | 1,969      |
|   |          |                        | 85            |                  |                |                |        |            |

|                                      |       |      | A              | s of December   | 31, 2016       |            |                |            |
|--------------------------------------|-------|------|----------------|-----------------|----------------|------------|----------------|------------|
|                                      |       |      | Expected Matur | rity Date       |                |            | Total carrying |            |
|                                      | 2017  | 2018 | 2019           | 2020            | 2021           | Thereafter | amount         | Fair value |
|                                      |       |      | (RMB equival   | ent in millions | , except inter | est rate)  |                |            |
| Average interest rate <sup>(1)</sup> | 1.68% |      | _              | <del>_</del>    | _              |            |                |            |
| Debts in Euro                        |       |      |                |                 |                |            |                |            |
| Fixed rate                           | _     | _    | _              | _               |                | _          |                | _          |
| Average interest rate                |       |      |                |                 |                |            |                |            |
| Variable rate                        | 5     | _    | _              | _               |                | _          | 5              | 5          |
| Average interest rate <sup>(1)</sup> | 0.68% | _    |                | _               |                | _          |                |            |
| Debts in Singapore Dollar            |       |      |                |                 |                |            |                |            |
| Fixed rate                           |       | _    |                |                 |                |            |                |            |
| Average interest rate                | _     | _    | _              | _               |                | _          |                |            |
| Variable rate                        | 21    |      |                |                 |                |            | 21             | 21         |
| Average interest rate <sup>(1)</sup> | 1.50% | _    | _              | _               | _              | _          |                |            |

<sup>(1)</sup> The average interest rates for variable rate debts are calculated based on the rates reported as of December 31, 2016.

#### **Interest Rate Risk**

We are exposed to interest rate risk resulting from fluctuations in interest rates on our short-term and long-term debts. Upward fluctuations in interest rates increase the cost of new debt and the interest cost of outstanding floating rate borrowings.

Our debts consist of fixed and variable rate debt obligations with original maturities ranging from one to thirty years. Fluctuations in interest rates can lead to significant fluctuations in the fair values of our debt obligations.

The following tables present principal cash flows and related weighted average interest rates by expected maturity dates of our interest rate sensitive financial instruments as of December 31, 2016 and 2017.

|                              |         |        | A              | s of December    | 31, 2017      |            |                       |            |
|------------------------------|---------|--------|----------------|------------------|---------------|------------|-----------------------|------------|
|                              |         | 1      | Expected Matur | ity Date         |               |            | Total carrying        |            |
|                              | 2018    | 2019   | 2020           | 2021             |               | Thereafter | amount <sup>(2)</sup> | Fair value |
|                              |         |        | (RMB equival   | ent in millions, | except intere | st rate)   |                       |            |
| Assets                       |         |        |                |                  |               |            |                       |            |
| Cash and cash equivalent     |         |        |                |                  |               |            |                       |            |
| In RMB                       | 101,613 | _      | <del></del>    | _                | _             | <u> </u>   | 101,613               | 101,613    |
| In US Dollar                 | 11,260  | _      |                | _                |               | _          | 11,260                | 11,260     |
| In HK Dollar                 | 87      | _      | _              | _                | _             | _          | 87                    | 87         |
| In Japanese Yen              | 13      |        |                |                  |               | -          | 13                    | 13         |
| In Euro                      | 136     | _      | _              | _                |               | _          | 136                   | 136        |
| Others                       | 109     | _      | _              | _                |               | _          | 109                   | 109        |
| Time deposits with financial |         |        |                |                  |               |            |                       |            |
| institutions                 |         |        |                |                  |               |            |                       |            |
| In RMB                       | 23,229  | _      | _              | _                | _             |            | 23,229                | 23,229     |
| In US Dollar                 | 28,557  | _      | _              | _                | _             | _          | 28,557                | 28,557     |
| Liabilities                  | ŕ       |        |                |                  |               |            | ĺ                     |            |
| Debts in RMB                 |         |        |                |                  |               |            |                       |            |
| Fixed rate                   | 31,841  | 5,406  | 15,230         | 40,621           | 7,467         | 895        | 101,460               | 100,233    |
| Average interest rate        | 2.93%   | 1.70%  | 1.96%          | 0.47%            | 1.99%         | 1.83%      |                       |            |
| Variable rate                | 13,240  | 11,363 | 2,498          | 1,171            | 1,146         | 1,790      | 31,208                | 31,208     |
|                              |         |        | 0.6            |                  |               |            |                       |            |
|                              |         |        | 86             |                  |               |            |                       |            |

|                                      |        |       | As             | of December | 31, 2017       |            |                       |            |
|--------------------------------------|--------|-------|----------------|-------------|----------------|------------|-----------------------|------------|
|                                      |        |       | Expected Matur | ity Date    |                |            | Total carrying        |            |
| _                                    | 2018   | 2019  | 2020           | 2021        | 2022           | Thereafter | amount <sup>(2)</sup> | Fair value |
|                                      |        |       | (RMB equivale  |             | , except inter | est rate)  |                       |            |
| Average interest rate <sup>(1)</sup> | 4.03%  | 3.94% | 3.68%          | 3.00%       | 2.96%          | 3.96%      |                       |            |
| Debts in US Dollar                   |        |       |                |             |                |            |                       |            |
| Fixed rate                           | 6,775  | 54    | 54             | 39          | 13             | 11,379     | 18,314                | 18,333     |
| Average interest rate                | 0.63%  | 3.03% | 3.03%          | 2.56%       | 1.37%          | 1.11%      | · —                   |            |
| Variable rate                        | 26,868 |       | <del></del>    |             | _              | _          | 26,868                | 26,868     |
| Average interest rate <sup>(1)</sup> | 1.90%  |       |                |             |                |            |                       |            |
| Debts in HK Dollar                   |        |       |                |             |                |            |                       |            |
| Fixed rate                           | 5      |       | <del></del>    |             | _              | _          | 5                     | 5          |
| Average interest rate                | 1.76%  |       | <del></del>    |             | _              | _          | _                     |            |
| Variable rate                        | 1,898  |       |                |             |                | _          | 1,898                 | 1,898      |
| Average interest rate <sup>(1)</sup> | 2.05%  | _     | _              |             | _              | _          | _                     |            |
| Debts in Singapore Dollar            |        |       |                |             |                |            |                       |            |
| Fixed rate                           | _      |       | <del></del>    | <del></del> |                | _          |                       |            |
| Average interest rate                |        |       |                |             |                | _          |                       |            |
| Variable rate                        | 20     |       | <del></del>    |             | _              | _          | 20                    | 20         |
| Average interest rate <sup>(1)</sup> | 1.57%  |       |                |             |                |            |                       | _          |

<sup>(2)</sup> The average interest rates for variable rate debts are calculated based on the rates reported as of December 31, 2017.

<sup>(3)</sup> Carrying amounts are used for loans from Sinopec Group Company and its affiliates as it is not practicable to estimate their fair values because the cost of obtaining discount and borrowing rates for comparable borrowings would be excessive.

|   |         |        | A                      | s of December | 31, 2016   |            |                                   |            |
|---|---------|--------|------------------------|---------------|------------|------------|-----------------------------------|------------|
|   |         | 17     | remonted Matur         | ity Data      |            |            | Total                             | _          |
|   | 2017    | 2018   | Expected Matur<br>2019 | 2020          | 2021       | Thereafter | carrying<br>amount <sup>(2)</sup> | Fair value |
|   | 2017    | 2016   | (RMB equivale          |               |            |            | amount                            | raii vaiue |
| Assets                                    |         |        | 1                      |               | , <b>.</b> | ,          |                                   |            |
| Cash and cash equivalent                  |         |        |                        |               |            |            |                                   |            |
| In RMB                                    | 103,522 | _      | _                      | _             | _          | _          | 103,522                           | 103,522    |
| In US Dollar                              | 20,745  |        | _                      |               |            | _          | 20,745                            | 20,745     |
| In HK Dollar                              | 82      | _      | _                      | _             | _          | _          | 82                                | 82         |
| In Japanese Yen                           | 12      |        | _                      |               |            |            | 12                                | 12         |
| In Euro                                   | 41      | _      | _                      | _             |            | _          | 41                                | 41         |
| Others                                    | 66      | _      | _                      |               |            |            | 66                                | 66         |
| Time deposits with financial institutions |         |        |                        |               |            |            |                                   |            |
| In RMB                                    | 10,186  | _      | _                      |               |            |            | 10,186                            | 10,186     |
| In US Dollar                              | 7,843   | _      | _                      | _             |            | _          | 7,843                             | 7,843      |
| Liabilities                               |         |        |                        |               |            |            |                                   |            |
| Debts in RMB                              |         |        |                        |               |            |            |                                   |            |
| Fixed rate                                | 40,904  | 19,614 | 5,353                  | 15,533        | 40,161     | 7,711      | 129,276                           | 127,737    |
| Average interest rate                     | 2.21%   | 2.78%  | 1.67%                  | 2.00%         | 0.43%      | 1.92%      |                                   |            |
| Variable rate                             | 17,288  | 320    | 8,105                  |               | 168        | 1,113      | 26,993                            | 26,993     |
| Average interest rate <sup>(1)</sup>      | 3.40%   | 4.35%  | 4.28%                  |               | 4.41%      | 4.41%      |                                   |            |
| Debts in US Dollar                        |         |        |                        |               |            |            |                                   |            |
| Fixed rate                                | 42      | 6,944  | 25                     | 25            | 283        | 12,091     | 19,410                            | 19,289     |
| Average interest rate                     | 1.40%   | 0.94%  | 1.41%                  | 1.41%         | 4.07%      | 1.11%      |                                   |            |
| Variable rate                             | 14,591  | _      |                        |               | _          | _          | 14,591                            | 14,584     |
|   |         |        | 87                     |               |            |            |                                   |            |

|                                      |       |      | A             | s of December    | 31, 2016        |            |                       |            |
|--------------------------------------|-------|------|---------------|------------------|-----------------|------------|-----------------------|------------|
|                                      |       |      | Expected Matu |                  |                 |            | Total carrying        |            |
|                                      | 2017  | 2018 | 2019          | 2020             | 2021            | Thereafter | amount <sup>(2)</sup> | Fair value |
|                                      |       |      | (RMB equival  | lent in millions | s, except inter | est rate)  |                       |            |
| Average interest rate <sup>(1)</sup> | 1.40% |      | _             | _                | _               | _          |                       |            |
| Debts in HK Dollar                   |       |      |               |                  |                 |            |                       |            |
| Fixed rate                           | _     | _    | _             | _                |                 | _          |                       |            |
| Average interest rate                | _     | _    | _             |                  |                 | _          |                       |            |
| Variable rate                        | 1,969 | _    | _             |                  |                 | _          | 1,969                 | 1,969      |
| Average interest rate <sup>(1)</sup> | 1.68% |      | _             | _                | _               | _          |                       |            |
| Debts in Euro                        |       |      |               |                  |                 |            |                       |            |
| Fixed rate                           | _     | _    |               |                  | _               | _          |                       |            |
| Average interest rate                | _     | _    | _             | _                |                 | _          |                       |            |
| Variable rate                        | 5     | _    | _             |                  |                 |            | 5                     | 5          |
| Average interest rate <sup>(1)</sup> | 0.68% | _    |               |                  |                 | _          |                       |            |
| Debts in Singapore Dollar            |       |      |               |                  |                 |            |                       |            |
| Fixed rate                           | _     | _    | <del></del>   | _                | _               |            |                       |            |
| Average interest rate                |       |      |               |                  |                 | _          |                       |            |
| Variable rate                        | 21    | _    | _             | _                | _               | _          | 21                    | 21         |
| Average interest rate <sup>(1)</sup> | 1.50% | _    | _             | _                | _               | _          |                       |            |

<sup>(1)</sup> The average interest rates for variable rate debts are calculated based on the rates reported as of December 31, 2016.

#### **ITEM 12.** DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

#### **Debt Securities** A.

Not applicable.

#### В. Warrants and Rights

Not applicable.

#### C. **Other Securities**

Not applicable.

#### D. **American Depositary Shares**

# **Depositary Fees and Charges**

Under the terms of the Deposit Agreement for China Petroleum & Chemical Corporation's American Depositary Shares (ADSs), an ADS holder may have to pay the following services fees to the Depositary:

| Fees                              |
|-----------------------------------|
| US\$5.00 (or less) per 100 ADSs   |
| (or portion of 100 ADSs) issued   |
| US\$5.00 (or less) per 100 ADSs   |
| (or portion of 100 ADSs) canceled |
| US\$2.00 (or less) per 100 ADSs   |
| (or portion of 100 ADSs) held     |
|                                   |
|                                   |

<sup>(2)</sup> Carrying amounts are used for loans from Sinopec Group Company and its affiliates as it is not practicable to estimate their fair values because the cost of obtaining discount and borrowing rates for comparable borrowings would be excessive.

| Services   | Fees                            |
|--|---------------------------------|
| Distribution of ADSs pursuant to stock dividends, free stock     | US\$5.00 (or less) per 100 ADSs |
| distributions or exercises of rights                             | (or portion of 100 ADSs) held   |
| Distribution of securities other than ADSs or rights to purchase | US\$5.00 (or less) per 100 ADSs |
| additional ADSs  | (or portion of 100 ADSs) held   |

An ADS holder will also be responsible to pay certain fees and expenses incurred by the Depositary and certain taxes and governmental charges such as:

- Taxes (including relevant interests and fines) and other governmental charges;
- such registration fees as may from time to time be in effect, for the registration of deposited securities in the register of members, or for the registration of transfers of deposited securities to the name of the Depositary or its nominee or the Custodian or its nominee on the making of deposits or withdrawals;
- such cable, telex and facsimile transmission expenses as are expressly provided in the Deposit Agreement;
- such expenses as are incurred by the Depositary in the conversion of foreign currency;
- such expenses as are incurred with the compliance with the foreign currency control, ADSs and other deposited securities related laws, regulations and rules; and
- any other charge payable by the Depositary, any of the Depositary's agents, including the Custodian, Depositary, or the agents of the Custodian or Depositary, in connection with the servicing of deposited securities.

#### Depositary Payments for the Year 2017

In 2017, Citibank, N.A., the Depositary for our ADR program, provided reimbursement net of applicable withholding taxes for our expenses related to the listing and investor' relations activities as follows:

- reimbursement of application fees: US\$ 90,804.85
- reimbursement of data infrastructure fees: US\$ 4,205.55
- reimbursement of proxy procedure fees: US\$ 37,785.55
- reimbursement of investor relations expenses (including expenses related to non-deal road show, investor meeting and investor relations agency): US\$ 232,460.07
- the accounting committee and accounting standard committee of public company: US\$ 35,137.88
- Total: US\$ 400,393.90

# ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

None.

#### ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

# A. MATERIAL MODIFICATIONS TO THE RIGHTS TO SECURITIES HOLDERS

None.

#### B. USE OF PROCEEDS

Not applicable.

#### ITEM 15. CONTROLS AND PROCEDURES

#### **Disclosure Controls and Procedures**

We maintain disclosure controls and procedures that are designed to ensure the information required to be disclosed in reports filed by us under the U.S. Securities Exchange Act of 1934 (Exchange Act), as amended, is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and that such information is accumulated and communicated to our management, including our principal executive officer and principal officer, as appropriate, to allow for timely decisions regarding required disclosure. Our management, with the participation of our principal executive officer and principal financial officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15 (e) and 15d-15(e) of the Exchange Act) as of December 31, 2017 (Evaluation Date), the end of the fiscal year covered by this annual report. Based on this evaluation, our principal executive officer and principal financial officer have concluded that, as of the Evaluation Date, our disclosure controls and procedures were effective.

#### Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) of the Securities Exchange Act of 1934). The Company's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Internal control over financial reporting cannot provide absolute assurance of achieving financial reporting objectives because of its inherent limitations. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management assessed the effectiveness of our internal control over financial reporting based upon the criteria established in *Internal Control — Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission as of December 31, 2017. Based on that evaluation, our management has concluded that our internal control over financial reporting was effective as of December 31, 2017 based on these criteria.

PricewaterhouseCoopers Zhong Tian LLP, an independent registered public accounting firm, has audited the consolidated financial statements included in this annual report on Form 20-F and, as part of the audit, has issued a report, included herein, on the effectiveness of our internal control over financial reporting.

# **Changes in Internal Control over Financial Reporting**

During the year ended December 31, 2017, there have been no changes in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

#### ITEM 16. RESERVED

[Reserved]

# ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT

The board of directors has determined that Mr. Andrew Y. Yan qualifies as an audit committee financial expert in accordance with the terms of Item 16.A of Form 20-F. Mr. Yan was appointed as an independent non-executive director and a manager of the audit committee of the sixth board of our company in 2015. For Mr. Yan's biographical information, see "Item 6 Directors, Senior Management and Employees — A. Directors, members of the supervisory committee and senior management."

#### ITEM 16B. CODE OF ETHICS

Our controlling shareholder, Sinopec Group Company, has adopted a Staff Code to provide disciplines and requirements for its staff's conducts, including legal and ethical matters as well as the sensitivities involved in reporting illegal and unethical matters. The Staff Code covers such areas as HSE, conflict of interests, anti-corruption, protection and proper use of our assets and properties as well as reporting requirements. The Staff Code also applies to all directors, officers and employees of each subsidiary of Sinopec Group Company, including us. We have provided all our directors and senior officers with a copy of the Staff Code and require them to comply with it in order to ensure our operations are proper and lawful. We have posted the Staff Code on our website, http://www.sinopec.com/listco/en/Resource/Pdf/ygsz2014b.pdf.

#### ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table sets forth the aggregate audit fees, audit-related fees, tax fees of our principal accountants and all other fees billed for products and services provided by our principal accountants other than the audit fees, audit-related fees and tax fees for each of the fiscal years 2016 and 2017.

|      | Audit Fees     | Audit-Related Fees | Tax Fees | Other Fees    |
|------|----------------|--------------------|----------|---------------|
| 2016 | RMB 73 million | _                  |          | RMB 2 million |
| 2017 | RMB 72 million | <del></del>        |          | RMB 5 million |

We are only allowed to engage our principal accountants to render audit or non-audit services, after the engagement has been approved by our audit committee.

#### ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

Not applicable.

#### ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

None

#### ITEM 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT

None.

# ITEM 16G. COMPARISON OF NEW YORK STOCK EXCHANGE CORPORATE GOVERNANCE RULES AND CHINA CORPORATE GOVERNANCE RULES FOR LISTED COMPANIES

Under the amended Corporate Governance Rules of the NYSE, foreign issuers (including us) listed on the NYSE are required to disclose a summary of the significant differences between their domestic corporate governance rules and NYSE corporate governance rules that would apply to a U.S. domestic issuer. A summary of such differences is listed below:

NYSE corporate governance rules

Corporate governance rules applicable to the domestically listed companies in China and the Company's governance practices

#### Corporate governance guidelines

Listed companies must adopt and disclose corporate governance guidelines, involving director responsibilities, director compensation, director continuing education, annual performance evaluation of the board of directors, etc.

PRC corporate governance rules promulgated by China Securities Regulatory Commission prescribe detailed guidelines on directors of the listed companies, including director selection, the structure of the board of directors and director performance evaluation etc.

The Company has complied with the above mentioned laws or rules.

#### NYSE corporate governance rules

#### **Director Independence**

A listed company must have a majority of independent directors on its board of directors. No director qualifies as "independent" unless the board of directors affirmatively determines that the director has no material relationship with the listed company (either directly or as a partner, shareholder or officer of an organization that has a relationship with the Company). In addition, a director must meet certain standards to be deemed independent. For example, a director is not independent if the director is, or has been within the last three years, an employee of the listed company, or an immediate family member is, or has been within the last three years, an executive officer of the listed company, or if the director has received, or has an immediate family member who has received, during any twelvemonth period within the last three years, more than US\$120,000 in direct compensation from the listed company, other than director and committee fees and pension or other forms of deferred compensation for prior service (provided such compensation is not contingent in any way on continued service).

To empower non-management directors to serve as a more effective check on management, the non-management directors of each listed company must meet at regularly scheduled executive sessions without management.

#### Nominating/Corporate Governance Committee

Listed companies must have a nominating/corporate governance committee composed entirely of independent directors.

The nominating/corporate governance committee must have a written charter that addresses the committee's purposes and responsibilities which, at minimum, must be to: search for eligible people for the board of directors, select and nominate directors for the next session of the shareholders' annual meeting, study and propose corporate governance guidelines, supervise the evaluation of the board of directors and management, and evaluate the performance of the committee every year.

It is required in China that any listed company must establish an independent director system and set forth specific requirements for the qualification of independent directors. For example, an independent director shall not hold any other position in the listed company other than being a director and shall not be influenced by the main shareholders or the controlling persons of the listed company, or by any other entities or persons with whom the listed company has a significant relationship.

The Company has complied with the relevant Chinese corporate governance rules and has implemented internal rules governing the independence and responsibilities of independent directors. The Company determines the independence of independent directors every year.

No similar requirements.

It is stipulated in China that the board of directors of a listed company may, through the resolution of the shareholders' meeting, establish a nominating committee composed entirely of directors, of which the independent directors shall be the majority and the convener.

Up to now, the Company has not set up any nominating committee.

Relevant responsibilities of the nominating/corporate governance committee are similar to those stipulated by the NYSE rules, but the main responsibilities do not include the research and recommendation of corporate governance guidelines, the supervision of the evaluation of the board of directors and management, or the annual evaluation of the committee.

#### NYSE corporate governance rules

#### **Compensation Committee**

Listed companies must have a compensation committee composed entirely of independent directors.

The compensation committee must have a written charter that addresses, at least, the following purposes and responsibilities:

- (1) review and approve the corporate goals associated with CEO's compensation, evaluate the performance of the CEO in fulfilling these goals, and, either as a committee or together with the other independent directors (as directed by the board), based on such evaluation, determine and approve the CEO's compensation level;
- (2) make recommendations to the board with respect to non-CEO executive officer compensation, and incentive-compensation and equity-based plans that are subject to board approval;
- (3) produce a committee report on executive compensation as required by the SEC to be included in the annual proxy statement or annual report filed with the SEC.

The charter must also include the requirement for an annual performance evaluation of the compensation committee.

The compensation committee may, in its sole discretion, retain or consult a compensation consultant, independent legal counsel or other advisor. The compensation committee shall be directly responsible for the appointment, compensation and oversight of the work of such advisor. A listed company must provide for appropriate funding for payment of reasonable compensation to such advisor. The compensation committee may select such advisor to the compensation committee only after taking into consideration all factors relevant to that person's independence from management.

# **Audit Committee**

Listed companies must have an audit committee that satisfies the requirements of Rule 10A-3 of Securities Exchange Act of 1934 (Exchange Act). It must have a minimum of three members, and all audit committee members must satisfy the requirements for independence set forth in Section 303A.02 of NYSE Corporate Governance Rules as well as the requirements of Rule 10A-3(b)(1) of the Exchange Act.

It is stipulated in China that the board of directors of a listed company may, subject to shareholders' resolution, have a compensation and assessment committee composed entirely of directors, of whom the independent directors are the majority and act as the convener.

It is stipulated in China that the responsibilities of the compensation committee are:

- (1) to review evaluation standards on the performance of directors and the senior management and submit suggestion to the board of directors;
- (2) to review compensation policies on the directors and the senior management.

But the committee is not required to produce a report on the executive compensation or make an annual performance evaluation of the committee.

The board of directors of the Company has established a compensation and performance evaluation committee composed mainly of independent directors who act as the convener, and the committee has established a written charter complying with the domestic corporate governance rules.

It is stipulated in China that the board of directors of a listed company may, subject to shareholders' resolution, establish an audit committee composed entirely of competent directors with expertise and business experience, of which the independent directors are the majority and act as the convener, and, at minimum, one independent director is an accounting professional.

#### NYSE corporate governance rules

The audit committee must have a written charter that specifies the purpose of the audit committee is, at minimum, to assist the board oversight of the integrity of financial statements, the Company's compliance with legal and regulatory requirements, qualifications and independence of independent auditors and the performance of the listed company's internal audit function and independent auditors.

In addition, the written charter must require the audit committee to prepare an audit committee report as required by the SEC to be included in the listed company's annual proxy statement as well as an annual performance evaluation of the audit committee.

The written charter must also specify the duties and responsibilities of the audit committee, which, at a minimum, must include those set out in Rule 10A-3(b)(2), (3), (4) and (5) of the Exchange Act, as well as other duties and responsibilities such as to obtain and review a report by the independent auditor at least annually, meet to review and discuss the listed company's annual audited financial statements and quarterly financial statements with management and independent auditor.

The audit committee must have a written charter that specifies the purpose of the audit committee is, at minimum, to assist the board oversight of the integrity of financial statements, the Company's compliance with legal and regulatory requirements, qualifications and independence of independent auditors and the performance of the listed company's internal audit function and independent auditors.

In addition, the written charter must require the audit committee to prepare an audit committee report as required by the SEC to be included in the listed company's annual proxy statement as well as an annual performance evaluation of the audit committee.

The written charter must also specify the duties and responsibilities of the audit committee, which, at a minimum, must include those set out in Rule 10A-3(b)(2), (3), (4) and (5) of the Exchange Act, as well as other duties and responsibilities such as to obtain and review a report by the independent auditor at least annually, meet to review and discuss the listed company's annual audited financial statements and quarterly financial statements with management and independent auditor.

Corporate governance rules applicable to the domestically listed companies in China and the Company's governance practices

The responsibilities of the audit committee are similar to those stipulated by the NYSE rules. The board of directors shall evaluate the independence and performance of members of the audit committee periodically, and may replace any member who is no longer suitable for the position. The Company shall disclose the performance of the audit committee in its annual report, including meetings convened by the audit committee.

The Board of Directors of the Company has established an audit committee that satisfies relevant domestic and overseas requirements and the audit committee has a written charter.

The responsibilities of the audit committee are similar to those stipulated by the NYSE rules. The board of directors shall evaluate the independence and performance of members of the audit committee periodically, and may replace any member who is no longer suitable for the position. The Company shall disclose the performance of the audit committee in its annual report, including meetings convened by the audit committee.

The Board of Directors of the Company has established an audit committee that satisfies relevant domestic and overseas requirements and the audit committee has a written charter.

#### NYSE corporate governance rules

Each listed company must have an internal audit department.

#### Shareholder approval of equity compensation plan

Shareholders must be given the opportunity to vote on all equity-compensation plans and material revisions thereto, except for, among others, plans that are made available to shareholders generally, such as typical dividend reinvestment plan and certain awards and plans in the context of mergers and acquisitions.

#### Code of ethics for directors, officers and employees

Listed companies must adopt and disclose a code of business conduct and ethics for directors, officers and employees, and promptly disclose any waivers of the code for directors or executive officers. Each code of business conduct and ethics must require that any waiver of the code for executive officers or directors may be made only by the board or a board committee.

Each listed company CEO must certify to the NYSE each year that he or she is not aware of any violation by the listed company of NYSE corporate governance listing standards and he or she must promptly notify the NYSE in writing of any non-compliance with any applicable provisions of Section 303A.

Corporate governance rules applicable to the domestically listed companies in China and the Company's governance practices

China has a similar regulatory provision, and the Company has an internal audit department.

The relevant regulations of China require the board of directors propose plans on the amount and types of director compensation for the shareholders' meeting to approve. The compensation plan of executive officers shall be approved by the board and disclosed to the public.

The Company has complied with the above mentioned laws or rules.

China does not have such requirement for a code for ethics. But our controlling shareholder, Sinopec Group Company, adopted a Staff Code in 2015 to provide disciplines and requirements for its staff's conducts, including legal and ethical matters as well as the sensitivities involved in reporting illegal and unethical matters. The Staff Code covers such areas as HSE, conflict of interests, anti-corruption, protection and proper use of our assets and properties as well as reporting requirements. The Staff Code also applies to all directors, officers and employees of each subsidiary of Sinopec Group Company, including us. In addition, the directors and officers must perform their legal responsibilities in accordance with the Company Law of PRC, relative requirements of CSRS and Mandatory Provisions to the Charter of Companies Listed Overseas. Meanwhile, the Company establishes The Model Code of Securities Transactions by Corporate Employees and The Rules of The Company's Shares Transactions by Corporate Directors, Superiors and Senior Managements to regulate the above mentioned people when transacting related securities. The Company also promulgated the Code for Employees of the Company as the standards of business conduct and ethics of the employees.

No similar requirements.

#### NYSE corporate governance rules

#### **Board of Supervisors**

Listed companies are not required to have a board of supervisors.

PRC corporate governance rules promulgated by China Securities Regulatory Commission prescribe that the board of supervisors of listed companies is responsible for supervising the compliance of the Company's financial affairs and the directors, managers and other senior executives of the Company, and safeguarding the legitimate rights and interests of the Company and the shareholders. The rules also provided detailed requirements in respect of the board of supervisors of listed companies, including its duties, composition, meeting procedures, etc.

The Company has complied with the above rules.

## ITEM 16H. MINE SAFETY DISCLOSURE

Not applicable.

# ITEM 17. FINANCIAL STATEMENTS

Not applicable.

# ITEM 18. FINANCIAL STATEMENTS

See consolidated financial statements included in this annual report following Item 19.

| ITEM 19. | EXHIBITS   |
|----------|--|
| 1*       | Articles of Association of the Registrant, amended and adopted by the shareholders' meeting on June 28, 2017.  |
| 1.1      | Amendment to Articles of Association of China Petroleum & Chemical Corporation, adopted by the shareholders' meeting on May 11, 2012 (English translation), incorporated by reference to Exhibit 1.1 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 11, 2013 (File Number: 001-15138).     |
| 1.2      | Amendment to Articles of Association of China Petroleum & Chemical Corporation, adopted by the shareholders' meeting on October 16, 2012 (English translation), incorporated by reference to Exhibit 1.2 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 11, 2013 (File Number: 001-15138). |
| 1.3      | Amendment to Articles of Association of China Petroleum & Chemical Corporation, adopted by the shareholders' meeting on May 29, 2013 (English translation), incorporated by reference to Exhibit 1.3 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 22, 2014 (File Number: 001-15138).     |
| 1.4      | Amendment to Articles of Association of China Petroleum & Chemical Corporation, adopted by the shareholders' meeting on May 9, 2014 (English translation), incorporate by reference to Exhibit 1.4 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 10, 2015 (File Number: 001-15138).       |
| 1.5      | Amendment to Articles of Association of China Petroleum & Chemical Corporation, adopted by the shareholders' meeting on May 27, 2015 (English translation), incorporated by reference to Exhibit 1.5 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 20, 2016 (File Number: 001-15138).     |

Forms of Director Service Contracts dated May 11, 2012 (English translation), incorporated by reference to 4.1 Exhibit 4.1 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 11, Forms of Supervisor Service Contracts dated May 11, 2012 (English translation), incorporated by reference to 42 Exhibit 4.2 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 11, 2013 (File Number: 001-15138) Reorganization Agreement between China Petrochemical Corporation and China Petroleum & Chemical 4.3 Corporation dated June 3, 2000 (including English translation), incorporated by reference to Exhibit 10.1 to our Registration Statement on Form F-1 filed with the Securities and Exchange Commission on October 10, 2000 (File Number: 333-12502). 4.4 Agreement for Mutual Provision of Products and Ancillary Services between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated June 3, 2000 (including English translation), incorporated by reference to Exhibit 10.3 to our Registration Statement on Form F-1 filed with the Securities and Exchange Commission on October 10, 2000 (File Number: 333-12502). 4.5 Agreement for Provision of Cultural, Educational, Hygiene and Community Services between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated June 3, 2000 (including English translation), incorporated by reference to Exhibit 10.4 to our Registration Statement on Form F-1 filed with the Securities and Exchange Commission on October 10, 2000 (File Number: 333-12502). Trademark License Agreement between China Petrochemical Corporation and China Petroleum & Chemical 4.6 Corporation dated June 3, 2000 (including English translation), incorporated by reference to Exhibit 10.6 to our Registration Statement on Form F-1 filed with the Securities and Exchange Commission on October 10, 2000 (File Number: 333-12502). Patents and Proprietary Technology License Contract between China Petrochemical Corporation and China 4.7 Petroleum & Chemical Corporation dated June 3, 2000 (including English translation), incorporated by reference to Exhibit 10.7 to our Registration Statement on Form F-1 filed with the Securities and Exchange Commission on October 10, 2000 (File Number: 333-12502). Computer Software License Contract between China Petrochemical Corporation and China Petroleum & 4.8 Chemical Corporation dated June 3, 2000 (including English translation), incorporated by reference to Exhibit 10.8 to our Registration Statement on Form F-1 filed with the Securities and Exchange Commission on October 10, 2000 (File Number: 333-12502). 4.9 Assets Swap Contract between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated June 3, 2000 (including English translation), incorporated by reference to Exhibit 10.9 to our Registration Statement on Form F-1 filed with the Securities and Exchange Commission on October 10, 2000 (File Number: 333-12502). Land Use Rights Leasing Contract between China Petrochemical Corporation and China Petroleum & Chemical 4.10 Corporation dated June 3, 2000 (including English translation), incorporated by reference to Exhibit 10.10 to our Registration Statement on Form F-1 filed with the Securities and Exchange Commission on October 10, 2000 (File Number: 333-12502). Property Leasing Contract between China Petrochemical Corporation and China Petroleum & Chemical 4.12 Corporation dated June 3, 2000 (including English translation), incorporated by reference to Exhibit 10.11 to our Registration Statement on Form F-1 filed with the Securities and Exchange Commission on October 10, 2000 (File Number: 333-12502).

Accounts Collectable Contract between China Petrochemical Corporation and China Petroleum & Chemical 4.13 Corporation dated August 16, 2000 (including English translation), incorporated by reference to Exhibit 10.17 to our Registration Statement on Form F-1 filed with the Securities and Exchange Commission on October 10, 2000 (File Number: 333-12502). 4.14 Loan Transfer and Adjustment Contract between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated August 16, 2000 (including English translation), incorporated by reference to Exhibit 10.18 to our Registration Statement on Form F-1 filed with the Securities and Exchange Commission on October 10, 2000 (File Number: 333-12502). Agreement on Adjustment to Related Party Transactions between China Petrochemical Corporation and China 4 15 Petroleum & Chemical Corporation dated June 11, 2001 (English translation), incorporated by reference to Exhibit 4.15 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 13, 2007 (File Number: 001-15138). 4.16 Land Use Right Leasing Agreement between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated August 22, 2003 (English translation), incorporated by reference to Exhibit 4.16 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 13, 2007 (File Number: 001-15138). 2004 Agreement on Adjustment to Related Party Transactions between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated October 31, 2004 (English translation), incorporated by 4 17 reference to Exhibit 4.17 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 13, 2007 (File Number: 001-15138). Memorandum on Adjustment of Rent of Land Use Rights between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated March 31, 2006 (English translation), incorporated by reference to 4.18 Exhibit 4.18 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 13. 2007 (File Number: 001-15138). 4.19 Supplemental Agreement on Related Party Transactions between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated March 31, 2006 (English translation), incorporated by reference to Exhibit 4.19 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 13, 2007 (File Number: 001-15138). Continuing Connected Transactions Second Supplemental Agreement between China Petrochemical Corporation 4.19.1 and China Petroleum & Chemical Corporation dated August 21, 2009 (English translation), incorporated by reference to Exhibit 4.21 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 30, 2010 (File Number: 001-15138). 4.19.2 Continuing Connected Transactions Third Supplemental Agreement between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated August 24, 2012 (English translation), incorporated by reference to Exhibit 4.19.2 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 11, 2013 (File Number: 001-15138). Memorandum on Adjustment of Rent of Land Use Rights between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated August 22, 2008 (English Translation), incorporated by reference to 4.20 Exhibit 4.20 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on May 20, 2009 (File Number: 001-15138). Land Use Rights Leasing Agreement Third Amendment Memo between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated August 24, 2012 (English Translation), incorporated by reference 4.20.1 to Exhibit 4.20.1 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 11, 2013 (File Number: 001-15138).

| 4.21     | Non-Compete Agreement Between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated June 3, 2000 and its related Undertakings (English translation), incorporated by reference to Exhibit 4.21 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on September 26, 2013 (File Number: 001-15138).                                       |
|----------|---|
| 4.21.1   | Undertakings from China Petrochemical Corporation Regarding Further Avoiding Competition with China Petroleum & Chemical Corporation dated April 28, 2014 (English translation), incorporated by reference to Exhibit 4.21.1 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 10, 2015 (File Number: 001-15138).  |
| 4.22     | A Supplementary Agreement to the existing Non-Compete Agreement Between China Petrochemical Corporation and China Petroleum & Chemical Corporation dated June 3, 2000 and its related Undertakings (English translation), incorporated by reference to Exhibit 4.22 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 20, 2016 (File Number: 001-15138). |
| 8.1*     | A list of the Registrant's subsidiaries.  |
| 12.1*    | Certification of Principal Executive Officer pursuant to Rule 13a-14(a).  |
| 12.2*    | Certification of Principal Financial Officer pursuant to Rule 13a-14(a).  |
| 13**     | Certification of CEO and CFO pursuant to 18 U.S.C. §1350, and Rule 13a-14(b).   |
| 15.1     | Letter from KPMG regarding Item 16F of this annual report, incorporated by reference to Exhibit 15.1 to our Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 11, 2013 (File Number: 001-15138).  |
| 101.INS* | XBRL Instance Document  |
| 101.SCH* | XBRL Taxonomy Extension Schema Document   |
| 101.CAL* | XBRL Taxonomy Extension Calculation Linkbase Document   |
| 101.DEF* | XBRL Taxonomy Extension Definition Linkbase Document  |
| 101.LAB* | XBRL Taxonomy Extension Label Linkbase Document   |
| 101.PRE* | XBRL Taxonomy Extension Presentation Linkbase Document  |

<sup>\*</sup> Filed herewith.

<sup>\*\*</sup> Furnished with this annual report on Form 20-F.

# **SIGNATURE**

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

China Petroleum & Chemical Corporation

By: /s/ Huang Wensheng

Name: Huang Wensheng
Title: Secretary to the Board of Directors

Date: April 27, 2018

# CHINA PETROLEUM & CHEMICAL CORPORATION AND SUBSIDIARIES

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## **Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Shareholders of China Petroleum & Chemical Corporation,

#### Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of China Petroleum & Chemical Corporation and its subsidiaries (the "Company") as of December 31, 2017 and 2016, and the related consolidated statements of income, comprehensive income, changes in equity and cash flows for each of the three years in the period ended December 31, 2017, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2017 in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the COSO.

#### **Basis for Opinions**

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Annual Report on Internal Control over Financial Reporting appearing in Item 15 of the 2017 Form 20-F. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

## Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers Zhong Tian LLP PricewaterhouseCoopers Zhong Tian LLP Shanghai, the People's Republic of China 23 March, 2018

We have served as the Company's auditor since 2013.

# CHINA PETROLEUM & CHEMICAL CORPORATION AND SUBSIDIARIES

# CONSOLIDATED STATEMENT OF INCOME FOR THE YEARS ENDED DECEMBER 31, 2015, 2016 AND 2017 (Amounts in million, except per share data)

|   | Years ended December 31, |                          |                          | er 31,                   |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
|   | Note                     | 2015                     | 2016                     | 2017                     |
|   |                          | RMB                      | RMB                      | RMB                      |
| Operating revenues  |                          |                          |                          |                          |
| Sales of goods  |                          | 1,977,877                | 1,880,190                | 2,300,470                |
| Other operating revenues  | 3                        | 42,498                   | 50,721                   | 59,723                   |
|   |                          | 2,020,375                | 1,930,911                | 2,360,193                |
|   |                          |                          |                          |                          |
| Operating expenses  |                          |                          |                          |                          |
| Purchased crude oil, products and operating supplies and expenses |                          | (1,494,046)              | (1,379,691)              | (1,770,651)              |
| Selling, general and administrative expenses                      | 4                        | (69,491)                 | (64,360)                 | (64,973)                 |
| Depreciation, depletion and amortization                          |                          | (96,460)                 | (108,425)                | (115,310)                |
| Exploration expenses, including dry holes                         |                          | (10,459)                 | (11,035)                 | (11,089)                 |
| Personnel expenses  | 5                        | (56,619)                 | (63,887)                 | (74,854)                 |
| Taxes other than income tax                                       | 6                        | (236,349)                | (232,006)                | (235,292)                |
| Other operating (expenses)/ income, net                           | 7                        | (129)                    | 5,686                    | (16,554)                 |
| Total operating expenses  |                          | $\overline{(1,963,553)}$ | $\overline{(1,853,718)}$ | $\overline{(2,288,723)}$ |
| Operating income  |                          | 56,822                   | 77,193                   | 71,470                   |
| •   |                          |                          |                          |                          |
| Finance costs   |                          |                          |                          |                          |
| Interest expense  | 8                        | (8,133)                  | (9,219)                  | (7,146)                  |
| Interest income   |                          | 3,010                    | 3,218                    | 5,254                    |
| Loss on embedded derivative component of the convertible bonds    | 39(g)                    | (259)                    |                          |                          |
| Net foreign currency exchange (loss)/gain                         | (2)                      | (3,857)                  | (610)                    | 332                      |
| Net finance costs   |                          | (9,239)                  | (6,611)                  | (1,560)                  |
| Investment income   |                          | 466                      | 263                      | 262                      |
| Share of profits less losses from associates and joint ventures   |                          | 8,362                    | 9,306                    | 16,525                   |
| Earnings before income tax  |                          | 56,411                   | 80,151                   | 86,697                   |
| Tax expense   | 9                        | (12,613)                 | (20,707)                 | (16,279)                 |
| Net income  |                          | 43,798                   | 59,444                   | 70,418                   |
|   |                          |                          |                          |                          |
| Attributable to:  |                          |                          |                          |                          |
| Owners of the Company   |                          | 32,512                   | 46,672                   | 51,244                   |
| Non-controlling interests   |                          | 11,286                   | 12,772                   | 19,174                   |
| Net income  |                          | 43,798                   | 59,444                   | 70,418                   |
| 14ct income   |                          | 43,776                   | 37,444                   | 70,410                   |
| Earnings per share:   |                          |                          |                          |                          |
| Basic   | 11                       | 0.27                     | 0.39                     | 0.42                     |
| Diluted   |                          |                          |                          |                          |
| Diruteu   | 11                       | 0.27                     | 0.39                     | 0.42                     |

See accompanying notes to consolidated financial statements.

# CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME FOR THE YEARS ENDED DECEMBER 31, 2015, 2016 AND 2017 (Amounts in million)

|  |      | Years e | ended December | 31,     |
|--|------|---------|----------------|---------|
|  | Note | 2015    | 2016           | 2017    |
|  |      | RMB     | RMB            | RMB     |
| Net income   |      | 43,798  | 59,444         | 70,418  |
| Other comprehensive income:  | 10   |         |                |         |
| Items that may be reclassified subsequently to profit or loss (net of tax and after reclassification adjustments): |      |         |                |         |
| Cash flow hedges   |      | 3,163   | 2,014          | (1,580) |
| Available-for-sale securities  |      | 62      | (24)           | (57)    |
| Share of other comprehensive (loss)/income of associates and joint ventures  |      | (5,356) | 45             | 1,053   |
| Foreign currency translation differences   |      | 2,268   | 4,298          | (3,792) |
| Total items that may be reclassified subsequently to profit or loss  |      | 137     | 6,333          | (4,376) |
| Total other comprehensive income   |      | 137     | 6,333          | (4,376) |
|  |      |         |                |         |
| Total comprehensive income for the year  |      | 43,935  | 65,777         | 66,042  |
|  |      |         |                |         |
| Attributable to:   |      |         |                |         |
| Owners of the Company  |      | 31,789  | 53,724         | 47,763  |
| Non-controlling interests  |      | 12,146  | 12,053         | 18,279  |
| Total comprehensive income for the year  |      | 43,935  | 65,777         | 66,042  |

# CONSOLIDATED BALANCE SHEET AS OF DECEMBER 31, 2016 AND 2017 (Amounts in million)

|   |          | December          | 31,               |
|---|----------|-------------------|-------------------|
|   | Note     | 2016              | 2017              |
| ACCEPTO   |          | RMB               | RMB               |
| ASSETS  |          |                   |                   |
| Current assets  |          | 124 460           | 112 210           |
| Cash and cash equivalents                                       |          | 124,468           | 113,218           |
| Time deposits with financial institutions                       | 10       | 18,029            | 51,786            |
| Financial assets at fair value through profit or loss           | 12       | 50.200            | 51,196            |
| Trade accounts receivable, net                                  | 13       | 50,289            | 68,494            |
| Bills receivable Inventories                                    | 14       | 13,197<br>156,511 | 16,207<br>186,693 |
| Prepaid expenses and other current assets                       | 15       | 49,767            | 41,455            |
|   | 13       | 412,261           | 529,049           |
| Total current assets  |          | 412,201           | 329,049           |
| Non-current assets  | 1.6      | 600.504           | (50.774           |
| Property, plant and equipment, net                              | 16       | 690,594           | 650,774           |
| Construction in progress  | 17       | 129,581           | 118,645           |
| Goodwill  | 18       | 6,353             | 8,634             |
| Interest in associates  | 19<br>20 | 66,116            | 79,726            |
| Interest in joint ventures Available-for-sale financial assets  | 20       | 50,696            | 51,361            |
| Deferred tax assets   | 21 22    | 11,408            | 1,676             |
|   | 22       | 7,214             | 15,131            |
| Lease prepayments   | 23       | 54,241<br>70,145  | 58,526<br>81,982  |
| Long-term prepayments and other assets Total non-current assets | 24       |                   |                   |
|   |          | 1,086,348         | 1,066,455         |
| Total assets  |          | 1,498,609         | 1,595,504         |
| LIABILITIES AND EQUITY  |          |                   |                   |
| Current liabilities   | 2.5      | 56.000            | 55.220            |
| Short-term debts  | 25       | 56,239            | 55,338            |
| Loans from Sinopec Group Company and fellow subsidiaries        | 25       | 18,580            | 25,311            |
| Trade accounts payable  | 26       | 174,301           | 200,073           |
| Bills payable   | 26       | 5,828             | 6,462             |
| Accrued expenses and other payables                             | 27       | 224,544           | 279,247           |
| Income tax payable  |          | 6,051             | 13,015            |
| Total current liabilities                                       |          | 485,543           | 579,446           |
| Non-current liabilities   |          |                   |                   |
| Long-term debts   | 25       | 72,674            | 55,804            |
| Loans from Sinopec Group Company and fellow subsidiaries        | 25       | 44,772            | 43,320            |
| Deferred tax liabilities  | 22       | 7,661             | 6,466             |
| Provisions  | 28       | 39,298            | 39,958            |
| Other long-term liabilities                                     |          | 17,426            | 17,620            |
| Total non-current liabilities                                   |          | 181,831           | 163,168           |
| Total liabilities   |          | 667,374           | 742,614           |
| Equity  |          |                   |                   |
| Share capital   | 29       | 121,071           | 121,071           |
| Reserves  | 39       | 589,923           | 605,049           |
| Total equity attributable to owners of the Company              |          | 710,994           | 726,120           |
| Non-controlling interests                                       |          | 120,241           | 126,770           |
| Total equity  |          | 831,235           | 852,890           |
| Total liabilities and equity                                    |          | 1,498,609         | 1,595,504         |

# CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FOR THE YEARS ENDED DECEMBER 31, 2015, 2016 AND 2017 (Amounts in million)

|   | Share<br>capital<br>RMB | Capital<br>reserve<br>RMB | Share<br>premium<br>RMB | Statutory<br>surplus<br>reserve<br>RMB | Dis-<br>cretionary<br>surplus<br>reserve<br>RMB | Other<br>reserves<br>RMB | Retained earnings | Total equity<br>attributable<br>to owners of<br>the<br>Company<br>RMB | Non-<br>controlling<br>interests<br>RMB | Total<br>equity<br>RMB |
|---|-------------------------|---------------------------|-------------------------|--|---|--------------------------|-------------------|---|---|------------------------|
| Balance as of December 31, 2014   | 118,280                 | (30,497)                  | 41,824                  | 76,552                                 | 117,000   | (6,179)                  | 276,061           | 593.041   | 52,536                                  | 645,577                |
| Contribution from SAMC in the Acquisition of Gaoqiao Branch of SAMC (Note 31)           | _                       | 2,214                     | _                       | _                                      | _   |                          | _                 | 2,214   | 1,811                                   | 4,025                  |
| Balance as of January 1, 2015   | 118,280                 | (28,283)                  | 41,824                  | 76,552                                 | 117,000   | (6,179)                  | 276,061           | 595,255   | 54,347                                  | 649,602                |
| Net income  | _                       | _                         | _                       | _                                      | _   | _                        | 32,512            | 32,512  | 11,286                                  | 43,798                 |
| Other comprehensive income (Note 10)  |                         |                           |                         |  |   | (1,169)                  |                   | (1,169)   | 1,306                                   | 137                    |
| Total comprehensive income for the year   | _                       | _                         | _                       | _                                      | _   | (1,169)                  | 32,512            | 31,343  | 12,592                                  | 43,935                 |
| Transactions with owners, recorded directly in equity:                                  |                         |                           |                         |  |   |                          |                   |   |   |                        |
| Contributions by and distributions to owners:   |                         |                           |                         |  |   |                          |                   |   |   |                        |
| Conversion of the 2011 Convertible Bonds (Note  |                         |                           |                         |  |   |                          |                   |   |   |                        |
| 39(g))  | 2,791                   | _                         | 14,026                  | _                                      | _   | _                        | _                 | 16,817  | _                                       | 16,817                 |
| Final dividend for 2014   | _                       | _                         | _                       | _                                      | _   | _                        | (13,318)          |   | _                                       | (13,318)               |
| Interim dividend for 2015   | _                       | _                         | _                       | _                                      | _   | _                        | (10,896)          | (10,896)  | _                                       | (10,896)               |
| Appropriation (Note 39 (c))   |                         | _                         | _                       | 3,088                                  |   |                          | (3,088)           | _   | _                                       |                        |
| Contributions to subsidiaries from non-   |                         |                           |                         |  |   |                          |                   |   |   |                        |
| controlling interests   | _                       | 56,224                    | _                       | _                                      | _   | 446                      | _                 | 56,670  | 48,807                                  | 105,477                |
| Distributions to non-controlling interests  | _                       | _                         | _                       | _                                      | _   | _                        | _                 | _   | (3,389)                                 | (3,389)                |
| Profit distribution to SAMC (Note 31)   |                         |                           |                         |  |   |                          | (74)              | (74)  | (60)                                    | (134)                  |
| Total contributions by and distributions to   |                         |                           |                         |  |   |                          |                   |   |   |                        |
| owners  | 2,791                   | 56,224                    | 14,026                  | 3,088                                  |   | 446                      | (27,376)          | 49,199  | 45,358                                  | 94,557                 |
| Changes in ownership interests in subsidiaries that do not result in a loss of control: |                         |                           |                         |  |   |                          |                   |   |   |                        |
| Transaction with non-controlling interests  | _                       | 326                       | _                       | _                                      |   | _                        | _                 | 326   | (326)                                   | _                      |
| Total changes in ownership interests in subsidiaries that do not result in a loss of    |                         | 326                       |                         |  |   |                          |                   | 326   | (226)                                   |                        |
| control   | 2.701                   |                           | 14.006                  | 2.000                                  |   | 446                      | (27.25.0          |   | (326)                                   | 04.555                 |
| Total transactions with owners  | 2,791                   | 56,550                    | 14,026                  | 3,088                                  |   | 446                      | (27,376)          | 49,525  | 45,032                                  | 94,557                 |
| Others  |                         | 74                        |                         |  |   | 121                      | (121)             | 74  | (7)                                     | 67                     |
| Balance as of December 31, 2015   | 121,071                 | 28,341                    | 55,850                  | 79,640                                 | 117,000   | (6,781)                  | 281,076           | 676,197   | 111,964                                 | 788,161                |

# CHINA PETROLEUM & CHEMICAL CORPORATION AND SUBSIDIARIES

# CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (CONTINUED) FOR THE YEARS ENDED DECEMBER 31, 2015, 2016 AND 2017 (Amounts in million)

|   | Share<br>capital<br>RMB | Capital<br>reserve<br>RMB | Share<br>premium<br>RMB | Statutory<br>surplus<br>reserve<br>RMB | Discretionary surplus reserve RMB | Other reserves RMB | Retained<br>earnings<br>RMB | Total equity attributable to owners of the Company RMB | Non-<br>controlling<br>interests<br>RMB | Total<br>equity<br>RMB |
|---|-------------------------|---------------------------|-------------------------|--|-----------------------------------|--------------------|-----------------------------|--|---|------------------------|
| Balance as of January 1, 2016   | 121,071                 | 28,341                    | 55,850                  | 79,640                                 | 117,000                           | (6,781)            | 281,076                     | 676,197  | 111,964                                 | 788,161                |
| Net income  |                         | ´ —                       | ´ —                     | ´ —                                    |                                   |                    | 46,672                      | 46,672   | 12,772                                  | 59,444                 |
| Other comprehensive income (Note 10)  | _                       | _                         | _                       | _                                      | _                                 | 7,052              | ´ —                         | 7,052  | (719)                                   | 6,333                  |
| Total comprehensive income for the year   |                         |                           |                         |  |                                   | 7,052              | 46,672                      | 53,724   | 12,053                                  | 65,777                 |
| Transactions with owners, recorded directly in equity:                                  |                         |                           |                         |  |                                   |                    |                             |  |   |                        |
| Contributions by and distributions to owners:   |                         |                           |                         |  |                                   |                    |                             |  |   |                        |
| Final dividend for 2015   | _                       | _                         | _                       | _                                      | _                                 | _                  | (7,264)                     | (7,264)  | _                                       | (7,264)                |
| Interim dividend for 2016   | _                       | _                         | _                       | _                                      |                                   |                    | (9,565)                     | (9,565)  | _                                       | (9,565)                |
| Appropriation (Note 39 (c))   | _                       | _                         | _                       | _                                      | _                                 | _                  | _                           | _  | _                                       | _                      |
| Distributions to non-controlling interests  |                         | _                         | _                       | _                                      |                                   |                    | _                           | _  | (6,146)                                 | (6,146)                |
| Profit distribution to SAMC (Note 31)   | _                       | _                         | _                       | _                                      | _                                 | _                  | (47)                        | (47)   | (39)                                    | (86)                   |
| Distribution to SAMC in the Acquisition of Gaoqiao Branch of SAMC (Note 31)             |                         | (2,137)                   |                         |  |                                   |                    |                             | (2,137)  | 2,137                                   |                        |
| Total contributions by and distributions to owners                                      |                         | (2,137)                   |                         |  |                                   |                    | (16,876)                    | (19,013)   | (4,048)                                 | (23,061)               |
| Changes in ownership interests in subsidiaries that do not result in a loss of control: |                         |                           |                         |  |                                   |                    |                             |  |   |                        |
| Transaction with non-controlling interests  | _                       | (30)                      | _                       | _                                      | _                                 | _                  | _                           | (30)   | 263                                     | 233                    |
| Total changes in ownership interests in subsidiaries that do not result in a loss       |                         | (20)                      |                         |  |                                   |                    |                             | (20)   | 262                                     | 222                    |
| of control  |                         | (30)                      |                         |  |                                   |                    |                             | (30)   | 263                                     | 233                    |
| Total transactions with owners  |                         | (2,167)                   |                         |  |                                   |                    | (16,876)                    | (19,043)   | (3,785)                                 | (22,828)               |
| Others  |                         | 116                       |                         |  |                                   | 153                | (153)                       | 116  | 9                                       | 125                    |
| Balance as of December 31, 2016   | 121,071                 | 26,290                    | 55,850                  | 79,640                                 | 117,000                           | 424                | 310,719                     | 710,994  | 120,241                                 | 831,235                |

# CHINA PETROLEUM & CHEMICAL CORPORATION AND SUBSIDIARIES

# CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (CONTINUED) FOR THE YEARS ENDED DECEMBER 31, 2015, 2016 AND 2017 (Amounts in million)

|   |         |         |         | 54.4.4            | Dis-                  |          |          | Total equity attributable | N                   |          |
|---|---------|---------|---------|-------------------|-----------------------|----------|----------|---------------------------|---------------------|----------|
|   | Share   | Capital | Share   | Statutory surplus | cretionary<br>surplus | Other    | Retained | to owners of<br>the       | Non-<br>controlling | Total    |
|   | capital | reserve | premium | reserve           | reserve               | reserves | earnings | Company                   | interests           | equity   |
|   | RMB     | RMB     | RMB     | RMB               | RMB                   | RMB      | RMB      | RMB                       | RMB                 | RMB      |
| Balance as of January 1, 2017   | 121,071 | 26,290  | 55,850  | 79,640            | 117,000               | 424      | 310,719  | 710,994                   | 120,241             | 831,235  |
| Net income  | _       | _       | _       | _                 | _                     | _        | 51,244   | 51,244                    | 19,174              | 70,418   |
| Other comprehensive income (Note 10)  | _       | _       | _       | _                 | _                     | (3,481)  | · —      | (3,481)                   | (895)               | (4,376)  |
| Total comprehensive income for the year   |         |         |         |                   |                       | (3,481)  | 51,244   | 47,763                    | 18,279              | 66,042   |
| Transactions with owners, recorded directly   |         |         |         |                   |                       |          |          |                           |                     |          |
| in equity:  |         |         |         |                   |                       |          |          |                           |                     |          |
| Contributions by and distributions to owners:   |         |         |         |                   |                       |          |          |                           |                     |          |
| Final dividend for 2016   | _       | _       | _       | _                 | _                     | _        | (20,582) | (20,582)                  | _                   | (20,582) |
| Interim dividend for 2017   |         |         |         |                   |                       |          | (12,107) | (12,107)                  | _                   | (12,107) |
| Appropriation (Note 39 (c))   | _       | _       | _       | 3,042             | _                     | _        | (3,042)  | _                         | _                   | _        |
| Distributions to non-controlling interests  |         |         |         |                   |                       |          |          |                           | (12,501)            | (12,501) |
| Total contributions by and distributions to   |         |         |         |                   |                       |          |          |                           |                     |          |
| owners  |         |         |         | 3,042             |                       |          | (35,731) | (32,689)                  | (12,501)            | (45,190) |
| Changes in ownership interests in subsidiaries that do not result in a loss of control: |         |         |         |                   |                       |          |          |                           |                     |          |
| Transaction with non-controlling interests  |         | (13)    |         |                   |                       |          |          | (13)                      | 724                 | 711      |
| Total changes in ownership interests in subsidiaries that do not result in a loss of    |         |         |         |                   |                       |          |          |                           |                     |          |
| control   |         | (13)    |         |                   |                       |          |          | (13)                      | 724                 | 711      |
| Total transactions with owners  |         | (13)    |         | 3,042             |                       |          | (35,731) | (32,702)                  | (11,777)            | (44,479) |
| Others  |         | 49      |         |                   |                       | 123      | (107)    | 65                        | 27                  | 92       |
| Balance as of December 31, 2017   | 121,071 | 26,326  | 55,850  | 82,682            | 117,000               | (2,934)  | 326,125  | 726,120                   | 126,770             | 852,890  |

# CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2015, 2016 AND 2017 (Amounts in million)

| Capital expenditure  |  |       | Years       | ended December 31, |           |
|--|--|-------|-------------|--------------------|-----------|
| Net cash generated from operating activities   (a)   165,740   214,543   199,93  |  | Note  | 2015        | 2016               |           |
| Capital expenditure  |  |       | RMB         | RMB                | RMB       |
| Capital expenditure         (95,495)         (65,467)         (63,54           Exploratory wells expenditure         (7,203)         (7,380)         (7,40)           Purchase of investments, investments in associates and investments in joint ventures         19,20         (23,351)         (16,389)         (57,62)           Payment for acquisition of subsidiary, net of cash acquired Proceeds from disposal of investments and investments in associates         (89)         —         (1,28)           Proceeds from disposal of property, plant, equipment and other non-current assets         427         440         1,31           Increase in time deposits with maturities over three months         (3,571)         (17,896)         (82,57)           Decrease in time deposits with maturities over three months         3,583         600         48,82           Interest received         2,228         2,331         3,66           Investment and dividend income received         3,399         4,028         8,50           Net cash used in investing activities         (116,719)         (66,217)         (145,32           Financing activities         (116,719)         (60,217)         (145,32           Proceeds from bank and other loans         (1,90,241         506,097         524,84           Repayments of bank and other loans         (1,152,837)         (56   | Net cash generated from operating activities                 | (a)   | 165,740     | 214,543            | 190,935   |
| Exploratory wells expenditure   (7,203)   (7,380)   (7,400)   (7 | Investing activities   | , í   |             |                    |           |
| Purchase of investments, investments in associates and investments in joint ventures         19,20         (23,351)         (16,389)         (57,62           Payment for acquisition of subsidiary, net of cash acquired Proceeds from disposal of investments and investments in associates         (89)         — (1,28           Proceeds from disposal of investments and investments in associates         3,353         33,516         4,80           Proceeds from disposal of property, plant, equipment and other non-current assets         427         440         1,31           Increase in time deposits with maturities over three months         (3,571)         (17,896)         (82,57           Decrease in time deposits with maturities over three months         3,583         600         48,82           Interest received         2,228         2,331         3,66           Investment and dividend income received         3,399         4,028         8,50           Net cash used in investing activities         (116,719)         (66,217)         (145,32           Financing activities         (116,719)         (66,217)         (145,32           Proceeds from bank and other loans         1,090,241         506,097         524,84           Repayments of bank and other loans         (1,152,837)         (569,091)         (536,38           Contributions to subsidiaries from non-controlling   | Capital expenditure  |       | (95,495)    | (65,467)           | (63,541)  |
| investments in joint ventures   19,20   (23,351)   (16,389)   (57,62)  | Exploratory wells expenditure                                |       | (7,203)     | (7,380)            | (7,407)   |
| Payment for acquisition of subsidiary, net of cash acquired         (89)         —         (1,28           Proceeds from disposal of investments and investments in associates         3,353         33,516         4,80           Proceeds from disposal of property, plant, equipment and other non-current assets         427         440         1,31           Increase in time deposits with maturities over three months         (3,571)         (17,896)         (82,57           Decrease in time deposits with maturities over three months         3,583         600         48,82           Interest received         2,228         2,331         3,66           Investment and dividend income received         3,399         4,028         8,50           Net cash used in investing activities         (116,719)         (66,217)         (145,32           Financing activities         (1,52,837)         (569,091)         (536,38           Power cash used in investing activities         (1,52,837)         (569,091)         (536,38)           Prinacing activities         (1,52,837)   | Purchase of investments, investments in associates and       |       |             |                    |           |
| Proceeds from disposal of investments and investments in associates         3,353         33,516         4,80           Proceeds from disposal of property, plant, equipment and other non-current assets         427         440         1,31           Increase in time deposits with maturities over three months         (3,571)         (17,896)         (82,57           Decrease in time deposits with maturities over three months         3,583         600         48,82           Interest received         2,228         2,331         3,66           Investment and dividend income received         3,399         4,028         8,50           Net cash used in investing activities         (116,719)         (66,217)         (145,32           Financing activities         7         506,097         524,84           Repayments of bank and other loans         1,090,241         506,097         524,84           Repayments of bank and other loans         (1,152,837)         (569,091)         (536,38           Contributions to subsidiaries from non-controlling interests         105,529         343         94           Dividends paid by the Company         (24,214)         (16,876)         (32,68           Distributions by subsidiaries to non-controlling interests         (1,481)         (6,553)         (7,53           Interest paid   | investments in joint ventures                                | 19,20 | (23,351)    | (16,389)           | (57,627)  |
| A sasociates   3,353   33,516   4,80   | Payment for acquisition of subsidiary, net of cash acquired  |       | (89)        | _                  | (1,288)   |
| Proceeds from disposal of property, plant, equipment and other non-current assets         427         440         1,31           Increase in time deposits with maturities over three months         (3,571)         (17,896)         (82,57)           Decrease in time deposits with maturities over three months         3,583         600         48,82           Interest received         2,228         2,331         3,66           Investment and dividend income received         3,399         4,028         8,50           Net cash used in investing activities         (116,719)         (66,217)         (145,32           Financing activities         2         2         2         2         8,50         (145,32         (16,719)         (66,217)         (145,32         (145,32         (116,719)         (66,217)         (145,32         (145,32         (116,719)         (66,217)         (145,32         (145,32         (116,719)         (66,217)         (145,32         (145,32         (116,719)         (66,217)         (145,32         (145,32         (116,719)         (66,217)         (145,32         (145,32         (115,32,837)         (56,097)         (52,484         (116,719)         (56,097)         (53,484)         (116,719)         (56,097)         (53,484)         (116,719)         (116,719)         (116,719)  | Proceeds from disposal of investments and investments in     |       |             |                    |           |
| other non-current assets         427         440         1,31           Increase in time deposits with maturities over three months         (3,571)         (17,896)         (82,57           Decrease in time deposits with maturities over three months         3,583         600         48,82           Interest received         2,228         2,331         3,66           Investment and dividend income received         3,399         4,028         8,50           Net cash used in investing activities         (116,719)         (66,217)         (145,32           Financing activities         1,090,241         506,097         524,84           Repayments of bank and other loans         (1,152,837)         (569,091)         (536,38           Contributions to subsidiaries from non-controlling interests         105,529         343         94           Dividends paid by the Company         (24,214)         (16,876)         (32,68           Distributions by subsidiaries to non-controlling interests         (1,481)         (6,553)         (7,53           Interest paid         (8,145)         (6,967)         (5,53           Finance lease payment         —         —         —         (15           Net acsh generated from/(used in) financing activities         9,093         (93,047)         (56,50 </td <td></td> <td></td> <td>3,353</td> <td>33,516</td> <td>4,809</td>  |  |       | 3,353       | 33,516             | 4,809     |
| Increase in time deposits with maturities over three months   (3,571)   (17,896)   (82,572)  | Proceeds from disposal of property, plant, equipment and     |       |             |                    |           |
| Decrease in time deposits with maturities over three months   3,583   600   48,82     Interest received   2,228   2,331   3,66     Investment and dividend income received   3,399   4,028   8,50     Net cash used in investing activities   (116,719)   (66,217)   (145,32     Financing activities     Proceeds from bank and other loans   1,090,241   506,097   524,84     Repayments of bank and other loans   (1,152,837)   (569,091)   (536,38     Contributions to subsidiaries from non-controlling interests   105,529   343   94     Dividends paid by the Company   (24,214)   (16,876)   (32,68     Distributions by subsidiaries to non-controlling interests   (1,481)   (6,553)   (7,53     Interest paid   (8,145)   (6,967)   (5,53     Finance lease payment   — (15     Net cash generated from/(used in) financing activities   9,093   (93,047)   (56,50     Net increase/(decrease) in cash and cash equivalents   58,114   55,279   (10,89     Cash and cash equivalents as of January 1   10,526   68,933   124,46   | other non-current assets                                     |       | 427         | 440                | 1,313     |
| months         3,583         600         48,82           Interest received         2,228         2,331         3,66           Investment and dividend income received         3,399         4,028         8,50           Net cash used in investing activities         (116,719)         (66,217)         (145,32           Financing activities         ***         ***         ***         ***           Proceeds from bank and other loans         1,090,241         506,097         524,84           Repayments of bank and other loans         (1,152,837)         (569,091)         (536,38           Contributions to subsidiaries from non-controlling interests         105,529         343         94           Dividends paid by the Company         (24,214)         (16,876)         (32,68           Distributions by subsidiaries to non-controlling interests         (1,481)         (6,553)         (7,53           Interest paid         (8,145)         (6,967)         (5,53           Finance lease payment         —         —         (15           Net cash generated from/(used in) financing activities         9,093         (93,047)         (56,50           Net increase/(decrease) in cash and cash equivalents         58,114         55,279         (10,89           Cash and cash equ   | Increase in time deposits with maturities over three months  |       | (3,571)     | (17,896)           | (82,577)  |
| Interest received         2,228         2,331         3,66           Investment and dividend income received         3,399         4,028         8,50           Net cash used in investing activities         (116,719)         (66,217)         (145,32           Financing activities         1,090,241         506,097         524,84           Proceeds from bank and other loans         (1,152,837)         (569,091)         (536,38           Contributions to subsidiaries from non-controlling interests         105,529         343         94           Dividends paid by the Company         (24,214)         (16,876)         (32,68           Distributions by subsidiaries to non-controlling interests         (1,481)         (6,553)         (7,53           Interest paid         (8,145)         (6,967)         (5,53           Finance lease payment         —         —         (15           Net cash generated from/(used in) financing activities         9,093         (93,047)         (56,50           Net increase/(decrease) in cash and cash equivalents         58,114         55,279         (10,89           Cash and cash equivalents as of January 1         10,526         68,933         124,46  | Decrease in time deposits with maturities over three         |       |             |                    |           |
| Investment and dividend income received   3,399   4,028   8,50   | months   |       |             | 600                | 48,820    |
| Net cash used in investing activities         (116,719)         (66,217)         (145,32)           Financing activities         1,090,241         506,097         524,84           Proceeds from bank and other loans         (1,152,837)         (569,091)         (536,38           Contributions to subsidiaries from non-controlling interests         105,529         343         94           Dividends paid by the Company         (24,214)         (16,876)         (32,68           Distributions by subsidiaries to non-controlling interests         (1,481)         (6,553)         (7,53)           Interest paid         (8,145)         (6,967)         (5,53)           Finance lease payment         —         —         —         (15           Net cash generated from/(used in) financing activities         9,093         (93,047)         (56,50)           Net increase/(decrease) in cash and cash equivalents         58,114         55,279         (10,89)           Cash and cash equivalents as of January 1         10,526         68,933         124,46   |  |       | 2,228       | 2,331              | 3,669     |
| Financing activities           Proceeds from bank and other loans         1,090,241         506,097         524,84           Repayments of bank and other loans         (1,152,837)         (569,091)         (536,38           Contributions to subsidiaries from non-controlling interests         105,529         343         94           Dividends paid by the Company         (24,214)         (16,876)         (32,68           Distributions by subsidiaries to non-controlling interests         (1,481)         (6,553)         (7,53           Interest paid         (8,145)         (6,967)         (5,53           Finance lease payment         —         —         (15           Net cash generated from/(used in) financing activities         9,093         (93,047)         (56,50           Net increase/(decrease) in cash and cash equivalents         58,114         55,279         (10,89           Cash and cash equivalents as of January 1         10,526         68,933         124,46  | Investment and dividend income received                      |       | 3,399       | 4,028              | 8,506     |
| Proceeds from bank and other loans         1,090,241         506,097         524,84           Repayments of bank and other loans         (1,152,837)         (569,091)         (536,38           Contributions to subsidiaries from non-controlling interests         105,529         343         94           Dividends paid by the Company         (24,214)         (16,876)         (32,68           Distributions by subsidiaries to non-controlling interests         (1,481)         (6,553)         (7,53           Interest paid         (8,145)         (6,967)         (5,53           Finance lease payment         —         —         (15           Net cash generated from/(used in) financing activities         9,093         (93,047)         (56,50           Net increase/(decrease) in cash and cash equivalents         58,114         55,279         (10,89           Cash and cash equivalents as of January 1         10,526         68,933         124,46   | Net cash used in investing activities                        |       | (116,719)   | (66,217)           | (145,323) |
| Repayments of bank and other loans       (1,152,837)       (569,091)       (536,38         Contributions to subsidiaries from non-controlling interests       105,529       343       94         Dividends paid by the Company       (24,214)       (16,876)       (32,68         Distributions by subsidiaries to non-controlling interests       (1,481)       (6,553)       (7,53         Interest paid       (8,145)       (6,967)       (5,53         Finance lease payment       —       —       (15         Net cash generated from/(used in) financing activities       9,093       (93,047)       (56,50         Net increase/(decrease) in cash and cash equivalents       58,114       55,279       (10,89         Cash and cash equivalents as of January 1       10,526       68,933       124,46   | Financing activities   |       |             |                    |           |
| Contributions to subsidiaries from non-controlling interests       105,529       343       94         Dividends paid by the Company       (24,214)       (16,876)       (32,68         Distributions by subsidiaries to non-controlling interests       (1,481)       (6,553)       (7,53         Interest paid       (8,145)       (6,967)       (5,53         Finance lease payment       —       —       —       (15         Net cash generated from/(used in) financing activities       9,093       (93,047)       (56,50         Net increase/(decrease) in cash and cash equivalents       58,114       55,279       (10,89         Cash and cash equivalents as of January 1       10,526       68,933       124,46  | Proceeds from bank and other loans                           |       | 1,090,241   | 506,097            | 524,843   |
| Dividends paid by the Company       (24,214)       (16,876)       (32,68         Distributions by subsidiaries to non-controlling interests       (1,481)       (6,553)       (7,53         Interest paid       (8,145)       (6,967)       (5,53         Finance lease payment       —       —       (15         Net cash generated from/(used in) financing activities       9,093       (93,047)       (56,50         Net increase/(decrease) in cash and cash equivalents       58,114       55,279       (10,89         Cash and cash equivalents as of January 1       10,526       68,933       124,46  | Repayments of bank and other loans                           |       | (1,152,837) | (569,091)          | (536,380) |
| Dividends paid by the Company       (24,214)       (16,876)       (32,68         Distributions by subsidiaries to non-controlling interests       (1,481)       (6,553)       (7,53         Interest paid       (8,145)       (6,967)       (5,53         Finance lease payment       —       —       (15         Net cash generated from/(used in) financing activities       9,093       (93,047)       (56,50         Net increase/(decrease) in cash and cash equivalents       58,114       55,279       (10,89         Cash and cash equivalents as of January 1       10,526       68,933       124,46  | Contributions to subsidiaries from non-controlling interests |       | 105,529     | 343                | 946       |
| Interest paid       (8,145)       (6,967)       (5,53)         Finance lease payment       —       —       —       (15)         Net cash generated from/(used in) financing activities       9,093       (93,047)       (56,50)         Net increase/(decrease) in cash and cash equivalents       58,114       55,279       (10,89)         Cash and cash equivalents as of January 1       10,526       68,933       124,46  |  |       | (24,214)    | (16,876)           | (32,689)  |
| Finance lease payment — — (15 Net cash generated from/(used in) financing activities 9,093 (93,047) (56,50 Net increase/(decrease) in cash and cash equivalents 58,114 55,279 (10,89) Cash and cash equivalents as of January 1 10,526 68,933 124,46   | Distributions by subsidiaries to non-controlling interests   |       | (1,481)     | (6,553)            | (7,539)   |
| Net cash generated from/(used in) financing activities9,093(93,047)(56,50)Net increase/(decrease) in cash and cash equivalents58,11455,279(10,89)Cash and cash equivalents as of January 110,52668,933124,46   | Interest paid  |       | (8,145)     | (6,967)            | (5,535)   |
| Net increase/(decrease) in cash and cash equivalents58,11455,279(10,89)Cash and cash equivalents as of January 110,52668,933124,46   | Finance lease payment  |       | <u> </u>    | ` <u> —</u>        | (155)     |
| Net increase/(decrease) in cash and cash equivalents58,11455,279(10,89)Cash and cash equivalents as of January 110,52668,933124,46   | Net cash generated from/(used in) financing activities       |       | 9,093       | (93,047)           | (56,509)  |
| Cash and cash equivalents as of January 1 10,526 68,933 124,46   | Net increase/(decrease) in cash and cash equivalents         |       | 58.114      |                    | (10,897)  |
|  |  |       |             |                    | 124,468   |
| Effect of foreign currency exchange rate changes 293 256 (35   | Effect of foreign currency exchange rate changes             |       | 293         | 256                | (353)     |
|  |  |       |             |                    | 113,218   |

#### NOTES TO CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2015, 2016 AND 2017 (Amounts in million)

# (a) Reconciliation of earnings before income tax to net cash generated from operating activities

|   | Years    | ended December 31, |          |
|---|----------|--------------------|----------|
|   | 2015     | 2016               | 2017     |
|   | RMB      | RMB                | RMB      |
| Operating activities  |          |                    |          |
| Earnings before income tax  | 56,411   | 80,151             | 86,697   |
| Adjustment for:   |          |                    |          |
| Depreciation, depletion and amortization                              | 96,460   | 108,425            | 115,310  |
| Dry hole costs written off  | 6,099    | 7,467              | 6,876    |
| Income from associates and joint ventures                             | (8,362)  | (9,306)            | (16,525) |
| Investment income   | (466)    | (263)              | (262)    |
| Gain on dilution and remeasurement of interests in the Pipeline Ltd   | _        | (20,562)           | _        |
| Gain on remeasurement of interests in the Shanghai SECCO (Note 31)    | _        | _                  | (3,941)  |
| Interest income   | (3,010)  | (3,218)            | (5,254)  |
| Interest expense  | 8,133    | 9,219              | 7,146    |
| Loss/(gain) on foreign currency exchange rate changes and derivative  |          |                    |          |
| financial instruments   | 3,085    | 86                 | (1,547)  |
| Loss on disposal of property, plant, equipment and other non-currents |          |                    |          |
| assets, net   | 748      | 1,528              | 1,518    |
| Impairment losses on assets   | 8,767    | 17,076             | 21,791   |
| Loss on embedded derivative component of the convertible bonds        | 259      | _                  | _        |
|   | 168,124  | 190,603            | 211,809  |
| Net charges from:   | ŕ        | ŕ                  | , i      |
| Accounts receivable and other current assets                          | 40,910   | (22,549)           | (31,151) |
| Inventories   | 39,136   | (11,364)           | (28,903) |
| Accounts payable and other current liabilities                        | (68,431) | 81,089             | 59,210   |
| • •   | 179,739  | 237,779            | 210,965  |
| Income tax paid   | (13,999) | (23,236)           | (20,030) |
| Net cash generated from operating activities                          | 165,740  | 214,543            | 190,935  |

#### 1 PRINCIPAL ACTIVITIES, ORGANIZATION AND BASIS OF PRESENTATION

#### Principal activities

China Petroleum & Chemical Corporation (the "Company") is an energy and chemical company that, through its subsidiaries (hereinafter collectively referred to as the "Group"), engages in oil and gas and chemical operations in the People's Republic of China (the "PRC"). Oil and gas operations consist of exploring for, developing and producing crude oil and natural gas; transporting crude oil and natural gas by pipelines; refining crude oil into finished petroleum products; and marketing crude oil, natural gas and refined petroleum products. Chemical operations include the manufacture and marketing of a wide range of chemicals for industrial uses.

#### **Organization**

The Company was established in the PRC on February 25, 2000 as a joint stock limited company as part of the reorganization (the "Reorganization") of China Petrochemical Corporation ("Sinopec Group Company"), the ultimate holding company of the Group and a ministry-level enterprise under the direct supervision of the State Council of the PRC. Prior to the incorporation of the Company, the oil and gas and chemical operations of the Group were carried on by oil administration bureaux, petrochemical and refining production enterprises and sales and marketing companies of Sinopec Group Company.

As part of the Reorganization, certain of Sinopec Group Company's core oil and gas and chemical operations and businesses together with the related assets and liabilities were transferred to the Company. On February 25, 2000, in consideration for Sinopec Group Company transferring such oil and gas and chemical operations and businesses and the related assets and liabilities to the Company, the Company issued 68.8 billion domestic state-owned ordinary shares with a par value of RMB 1.00 each to Sinopec Group Company. The shares issued to Sinopec Group Company on February 25, 2000 represented the entire registered and issued share capital of the Company as of that date. The oil and gas and chemical operations and businesses transferred to the Company were related to (i) the exploration, development and production of crude oil and natural gas, (ii) the refining, transportation, storage and marketing of crude oil and petroleum products, and (iii) the production and sales of chemicals.

#### Basis of preparation

The accompanying consolidated financial statements have been prepared in accordance with applicable International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). IFRS includes International Accounting Standards ("IAS") and related interpretations ("IFRIC"). A summary of the significant accounting policies adopted by the Group are set out in Note 2. The accompanying financial statements were authorized for issue by the Board of Directors on March 23, 2018

#### (a) New and amended standards and interpretations adopted by the Group

The following relevant IFRS, amendments to existing IFRS and interpretation of IFRS have been published and are mandatory for the year beginning on January 1, 2017 and have been adopted by the Group in current accounting period:

Amendments to IAS 7, 'Statement of cash flows', the IASB has issued an amendment to IAS 7 introducing an additional disclosure that will enable users of financial statements to evaluate changes in liabilities arising from financing activities. The amendment is part of the IASB's Disclosure Initiative, which continues to explore how financial statement disclosure can be improved. Amendments to IAS 7 are effective for annual periods beginning on January 1, 2017.

Amendments to IAS 12, 'Income taxes', the IASB has issued amendments to IAS 12, 'Income taxes'. These amendments on the recognition of deferred tax assets for unrealized losses clarify how to account for deferred tax assets related to debt instruments measured at fair value. Amendments to IAS 12 are effective for annual periods beginning on January 1, 2017.

There have been no significant changes to the accounting policies applied in these financial statements for the periods presented as a result of these developments.

The Group has not early adopted any new standard or interpretation that is not yet effective for the current accounting period.

# (b) New and amended standards and interpretations not yet adopted by the Group

The following relevant IFRS, amendments to existing IFRS and interpretation of IFRS have been published and are mandatory for accounting periods beginning on or after January 1, 2018 or later periods and have not been early adopted by the Group. Management is in the process of making an assessment of what the impact of these amendments, new standards and new interpretations is expected to be in the period of initial application and has so far concluded that, except for IFRS 16, the adoption of these amendments, new standards and new interpretations is unlikely to have a significant impact on the Group's results of operations and financial position.

IFRS 9, 'Financial instruments', addresses the classification, measurement and recognition of financial assets and financial liabilities. The complete version of IFRS 9 was issued in July 2014. It replaces the whole of IAS 39. IFRS 9 introduces a new model for the recognition of impairment losses - the expected credit losses model, which constitutes a change from the incurred loss model in IAS 39. IFRS 9 applies to all hedging relationships, with the exception of portfolio fair value hedges of interest rate risk. The new guidance better aligns hedge accounting with the risk management activities of an entity and provides relief from the more "rule—based" approach of IAS 39. IFRS 9 is effective for annual periods beginning on January 1, 2018. Earlier application is permitted.

IFRS 15, 'Revenue from contracts with customers', establishes a comprehensive framework for determining when to recognize revenue and how much revenue to recognize through a 5-step approach. IFRS 15 provides specific guidance on capitalization of contract cost and license arrangements. It also includes a cohesive set of disclosure requirements about the nature, amount, timing and uncertainty of revenue and cash flows arising from the entity's contracts with customers. The core principle is that a company should recognize revenue to depict the transfer of promised goods or services to the customer in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. IFRS 15 replaces the previous revenue standards: IAS 18 'Revenue' and IAS 11 'Construction Contracts' and the related Interpretations on revenue recognition: IFRIC 13 'Customer Loyalty Programmes', IFRIC 15 'Agreements for the Construction of Real Estate', IFRIC 18 'Transfers of Assets from Customers' and SIC-31 'Revenue-Barter Transactions Involving Advertising Services'. IFRS 15 is effective for annual reporting periods beginning on January 1, 2018. Earlier application is permitted.

IFRS 16, 'Leases', provides updated guidance on the definition of leases, and the guidance on the combination and separation of contracts. Under IFRS 16, a contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. IFRS 16 requires lessees to recognize lease liability reflecting future lease payments and a 'right-of-use-asset' for almost all lease contracts, with an exemption for certain short-term leases and leases of low-value assets. The lessors accounting stays almost the same as under IAS 17 'Leases'. IFRS 16 is effective for annual reporting periods beginning on January 1, 2019. Earlier application is permitted if IFRS 15 is also applied.

Amendments to IFRS 10 and IAS 28 on sale or contribution of assets between an investor and its associate or joint venture. The amendments address an inconsistency between IFRS 10 and IAS 28 in the sale and contribution of assets between an investor and its associate or joint venture. A full gain or loss is recognized when a transaction involves a business. A partial gain or loss is recognized when a transaction involves assets that do not constitute a business, even if those assets are in a subsidiary. The amendments were originally intended to be effective for annual periods beginning on or after January 1, 2016. The effective date has now been deferred/removed. Early application of the amendments continues to be permitted.

The accompanying consolidated financial statements are prepared on the historical cost basis except for the remeasurement of available-for-sale securities (Note 2(k)), securities held for trading (Note 2(k)) and derivative financial instruments (Note 2(l) and (n)) to their fair values.

The preparation of the consolidated financial statements in accordance with IFRS requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the period. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgements about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ from those estimates

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Key assumptions and estimation made by management in the application of IFRS that have significant effect on the consolidated financial statements and the major sources of estimation uncertainty are disclosed in Note 37.

#### 2 SIGNIFICANT ACCOUNTING POLICIES

#### (a) Basis of consolidation

The consolidated financial statements comprise the Company and its subsidiaries, and interest in associates and joint ventures.

#### (i) Subsidiaries and non-controlling interests

Subsidiaries are those entities controlled by the Group. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

The financial statements of subsidiaries are included in the consolidated financial statements from the date that control effectively commences until the date that control effectively ceases.

Non-controlling interests at the balance sheet date, being the portion of the net assets of subsidiaries attributable to equity interests that are not owned by the Company, whether directly or indirectly through subsidiaries, are presented in the consolidated balance sheet and consolidated statement of changes in equity within equity, separately from equity attributable to the owners of the Company. Non-controlling interests in the results of the Group are presented on the face of the consolidated statement of income and the consolidated statement of comprehensive income as an allocation of the total profit or loss and total comprehensive income for the year between non-controlling interests and the owners of the Company.

Changes in the Group's interests in a subsidiary that do not result in a loss of control are accounted for as equity transactions, whereby adjustments are made to the amounts of controlling and non-controlling interests within consolidated equity to reflect the change in relative interests, but no adjustments are made to goodwill and no gain or loss is recognized.

If a business combination involving entities not under common control is achieved in stages, the acquisition date carrying value of the acquirer's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date. Any gains or losses arising from such remeasurement are recognized in the consolidated statement of income.

When the Group loses control of a subsidiary, it is accounted for as a disposal of the entire interest in that subsidiary, with a resulting gain or loss being recognized in profit or loss. Any interest retained in that former subsidiary at the date when control is lost is recognized at fair value and this amount is regarded as the fair value on initial recognition of a financial asset (Note 2(k)) or, when appropriate, the cost on initial recognition of an investment in an associate or joint venture (Note 2(a)(ii)).

The particulars of the Group's principal subsidiaries are set out in Note 35.

#### (ii) Associates and joint ventures

An associate is an entity, not being a subsidiary, in which the Group exercises significant influence over its management. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

The investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations each investor has rather than the legal structure of the joint arrangement. A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement.

Investments in associates and joint ventures are accounted for in the consolidated financial statements using the equity method from the date that significant influence or joint control commences until the date that significant influence or joint control ceases. Under the equity method, the investment is initially recorded at cost and adjusted thereafter for the post acquisition change in the Group's share of the investee's net assets and any impairment loss relating to the investment (Note 2 (j) and (o)).

The Group's share of the post-acquisition, post-tax results of the investees and any impairment losses for the year are recognized in the consolidated statement of income, whereas the Group's share of the post-acquisition post-tax items of the investees' other comprehensive income is recognized in the consolidated statement of comprehensive income.

When the Group ceases to have significant influence over an associate or joint control over a joint venture, it is accounted for as a disposal of the entire interest in that investee, with a resulting gain or loss being recognized in profit or loss. Any interest retained in that former investee at the date when significant influence or joint control is lost is recognized at fair value and this amount is regarded as the fair value on initial recognition of a financial asset (see Note 2(k)) or, when appropriate, the cost on initial recognition of an investment in an associate (see Note 2(a) (ii)).

#### (iii) Transactions eliminated on consolidation

Inter-company balances and transactions and any unrealized gains arising from inter—company transactions are eliminated on consolidation. Unrealized gains arising from transactions with associates and joint ventures are eliminated to the extent of the Group's interest in the entity. Unrealized losses are eliminated in the same way as unrealized gains, but only to the extent that there is no evidence of impairment.

#### (iv) Merger accounting for common control combination

The consolidated financial statements incorporate the financial statements of the combining entities or businesses in which the common control combination occurs as if they had been combined from the date when the combining entities or businesses first came under the control of the controlling party. The net assets of the combining entities or businesses are combined using the existing book values from the controlling parties' perspective. No amount is recognized as consideration for goodwill or excess of acquirers' interest in the net fair value of acquiree's identifiable assets, liabilities and contingent liabilities over cost at the time of common control combination, to the extent of the continuation of the controlling party's interest.

The consolidated statement of income includes the results of each of the combining entities or businesses from the earliest date presented or since the date when the combining entities or businesses first came under the common control, where there is a shorter period, regardless of the date of the common control combination. The comparative amounts in the consolidated financial statements are presented as if the entities or businesses had been combined at the previous balance sheet date or when they first came under common control, whichever is shorter.

A uniform set of accounting policies is adopted by those entities. All intra—group transactions, balances and unrealized gains on transactions between combining entities or businesses are eliminated on consolidation. Transaction costs, including professional fees, registration fees, costs of furnishing information to shareholders, costs or losses incurred in combining operations of the previously separate businesses, etc., incurred in relation to the common control combination that is to be accounted for by using merger accounting is recognized as an expense in the period in which it is incurred.

#### (b) Translation of foreign currencies

The presentation currency of the Group is Renminbi. Foreign currency transactions during the year are translated into Renminbi at the applicable rates of exchange quoted by the People's Bank of China ("PBOC") prevailing on the transaction dates. Foreign currency monetary assets and liabilities are translated into Renminbi at the PBOC's rates at the balance sheet date.

Exchange differences, other than those capitalized as construction in progress, are recognized as income or expenses in the "finance costs" section of the consolidated statement of income.

The results of foreign operations are translated into Renminbi at the applicable rates quoted by the PBOC prevailing on the transaction dates. Balance sheet items, including goodwill arising on consolidation of foreign operations are translated into Renminbi at the closing foreign exchange rates at the balance sheet date. The income and expenses of foreign operations are translated into Renminbi at the spot exchange rates or an exchange rate that approximates the spot exchange rates on the transaction dates. The resulting exchange differences are recognized in other comprehensive income and accumulated in equity in the other reserves.

On disposal of a foreign operation, the cumulative amount of the exchange differences relating to that foreign operation is reclassified from equity to the consolidated statement of income when the profit or loss on disposal is recognized.

#### (c) Cash and cash equivalents

Cash equivalents consist of time deposits with financial institutions with an initial term of less than three months when purchased. Cash equivalents are stated at cost, which approximates fair value.

#### (d) Trade, bills and other receivables

Trade, bills and other receivables are initially recognized at fair value and thereafter stated at amortized cost using the effective interest method, less impairment losses for bad and doubtful debts (Note 2(o)). Trade, bills and other receivables are derecognized if the Group's contractual rights to the cash flows from these financial assets expire or if the Group transfers these financial assets to another party without retaining control or substantially all risks and rewards of the assets.

# (e) Inventories

Inventories are stated at the lower of cost and net realizable value. Cost includes the cost of purchase computed using the weighted average method and, in the case of work in progress and finished goods, direct labor and an appropriate proportion of production overheads. Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to make the sale.

#### (f) Property, plant and equipment

An item of property, plant and equipment is initially recorded at cost, less accumulated depreciation and impairment losses (Note 2(o)). The cost of an asset comprises its purchase price, any directly attributable costs of bringing the asset to working condition and location for its intended use. The Group recognizes in the carrying amount of an item of property, plant and equipment the cost of replacing part of such an item when that cost is incurred when it is probable that the future economic benefits embodied with the item will flow to the Group and the cost of the item can be measured reliably. All other expenditure is recognized as an expense in the consolidated statement of income in the year in which it is incurred.

Gains or losses arising from the retirement or disposal of an item of property, plant and equipment, other than oil and gas properties, are determined as the difference between the net disposal proceeds and the carrying amount of the item and are recognized as income or expense in the consolidated statement of income on the date of retirement or disposal.

Depreciation is provided to write off the cost amount of items of property, plant and equipment, other than oil and gas properties, over its estimated useful life on a straight-line basis, after taking into account its estimated residual value, as follows:

|                                 | Estimated usage period | Estimated residuals rate |
|---------------------------------|------------------------|--------------------------|
| Buildings                       | 12 to 50 years         | 3%                       |
| Equipment, machinery and others | 4 to 30 years          | 3%                       |

Where parts of an item of property, plant and equipment have different useful lives, the cost of the item is allocated on a reasonable basis between the parts and each part is depreciated separately. Both the useful life of an asset and its residual value, if any, are reassessed annually.

#### (g) Oil and gas properties

The Group uses the successful efforts method of accounting for its oil and gas producing activities. Under this method, costs of development wells, the related supporting equipment and proved mineral interests in properties are capitalized. The cost of exploratory wells is initially capitalized as construction in progress pending determination of whether the well has found proved reserves. The impairment of exploratory well costs occurs upon the determination that the well has not found proved reserves. The exploratory well costs are usually not carried as an asset for more than one year following completion of drilling, unless (i) the well has found a sufficient quantity of reserves to justify its completion as a producing well if the required capital expenditure is made; (ii) drilling of the additional exploratory wells is under way or firmly planned for the near future; or (iii) other activities are being undertaken to sufficiently progress the assessing of the reserves and the economic and operating viability of the project. All other exploration costs, including geological and geophysical costs, other dry hole costs and annual lease rentals, are expensed as incurred. Capitalized costs of proved oil and gas properties are amortized on a unit-of-production method based on volumes produced and reserves.

Management estimates future dismantlement costs for oil and gas properties with reference to engineering estimates after taking into consideration the anticipated method of dismantlement required in accordance with the industry practices and the future cash flows are adjusted to reflect such risks specific to the liability, as appropriate. These estimated future dismantlement costs are discounted at a pre-tax risk-free rate and are capitalized as oil and gas properties, which are subsequently amortized as part of the costs of the oil and gas properties.

#### (h) Lease prepayments

Lease prepayments represent land use rights paid to the relevant government authorities. Land use rights are carried at cost less the accumulated amount charged to expense and impairment losses (Note 2(o)). The cost of lease prepayments is charged to expense on a straight-line basis over the respective periods of the rights.

#### (i) Construction in progress

Construction in progress represents buildings, oil and gas properties, various plant and equipment under construction and pending installation, and is stated at cost less impairment losses (Note 2(o)). Cost comprises direct costs of construction as well as interest charges, and foreign exchange differences on related borrowed funds to the extent that they are regarded as an adjustment to interest charges, during the periods of construction.

Construction in progress is transferred to property, plant and equipment when the asset is substantially ready for its intended use.

No depreciation is provided in respect of construction in progress.

#### (i) Goodwill

Goodwill represents amounts arising on acquisition of subsidiaries, associates or joint ventures. Goodwill represents the difference between the cost of acquisition and the fair value of the net identifiable assets acquired.

Prior to January 1, 2008, the acquisition of the non-controlling interests of a consolidated subsidiary was accounted for using the acquisition method whereby the difference between the cost of acquisition and the fair value of the net identifiable assets acquired (on a proportionate share) was recognized as goodwill. From January 1, 2008, any difference between the amount by which the non-controlling interest is adjusted (such as through an acquisition of the non-controlling interests) and the cash or other considerations paid is recognized in equity.

Goodwill is stated at cost less accumulated impairment losses. Goodwill arising on a business combination is allocated to each cash-generating unit, or groups of cash-generating units, that is expected to benefit the synergies of the combination and is tested annually for impairment (Note 2(o)). In respect of associates or joint ventures, the carrying amount of goodwill is included in the carrying amount of the interest in the associates or joint ventures and the investment as a whole is tested for impairment whenever there is objective evidence of impairment (Note 2(o)).

#### (k) Available-for-sale financial assets

Investments in available-for-sale securities are carried at fair value with any change in fair value recognized in other comprehensive income and accumulated separately in equity in other reserves. When these investments are derecognized or impaired, the cumulative gain or loss is reclassified from equity to the consolidated statement of income. Investments in equity securities, other than investments in associates and joint ventures, that do not have a quoted market price in an active market and whose fair value cannot be reliably measured are recognized in the balance sheet at cost less impairment losses (Note 2(o)).

Investments in securities held for trading are classified as current assets. Any attributable transaction costs are recognized in the consolidated statement of income as incurred. At each balance sheet date, the fair value is remeasured, with any resultant gain or loss being recognized in the consolidated statement of income.

#### (I) Derivative financial instruments

Derivative financial instruments are recognized initially at fair value. At each balance sheet date, the fair value is remeasured. The gain or loss on remeasurement to fair value is recognized immediately in other operating (expense)/income, net, except where the derivatives qualify for cash flow hedge accounting or the hedge of net investment in a foreign operation, in which case recognition of any resulting gain or loss depends on the nature of the item being hedged (Note 2(n)).

#### (m) Offsetting financial instruments

Financial assets and liabilities are presented respectively in the consolidated balance sheet, without any offset. However, they are offset and reported in the balance sheet when satisfied the following: (i) There is a legally enforceable right to offset the recognized amounts. (ii) There is an intention to settle on a net basis or realize the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the Company or the counterparty.

#### (n) Hedging

#### (i) Cash flow hedges

Where a derivative financial instrument is designated as a hedge of the variability in cash flows of a recognized asset or liability or a highly probable forecast transaction or the foreign currency risk of a committed future transaction, the effective portion of any gains or losses on remeasurement of the derivative financial instrument to fair value are recognized in other comprehensive income and accumulated separately in equity in other reserves. The ineffective portion of any gain or loss is recognized immediately in the consolidated statement of income.

If a hedge of a forecast transaction subsequently results in the recognition of a non-financial asset, the associated gain or loss is reclassified from equity to be included in the initial cost or other carrying amount of the non-financial asset.

If a hedge of a forecast transaction subsequently results in the recognition of a financial asset or a financial liability, the associated gain or loss is reclassified from equity to the consolidated statement of income in the same period or periods during which the asset acquired or liability assumed affects the consolidated statement of income (such as when interest income or expense is recognized).

For cash flow hedges, other than those covered by the preceding two policy statements, the associated gain or loss is reclassified from equity to the consolidated statement of income in the same period or periods during which the hedged forecast transaction affects the consolidated statement of income.

When a hedging instrument expires or is sold, terminated, exercised, or the entity revokes designation of the hedge relationship but the hedged forecast transaction is still expected to occur, the cumulative gain or loss at that point remains in equity until the transaction occurs and it is recognized in accordance with the above policy. If the hedged transaction is no longer expected to take place, the cumulative unrealized gain or loss is reclassified from equity to the consolidated statement of income immediately.

#### (ii) Fair value hedges

A fair value hedge is a hedge of the exposure to changes in fair value of a recognized asset or liability or an unrecognized firm commitment, or an identified portion of such an asset, liability or unrecognized firm commitment.

The gain or loss from remeasuring the hedging instrument at fair value is recognized in the consolidated statement of income. The gain or loss on the hedged item attributable to the hedged risk adjusts the carrying amount of the hedged item and is recognized in the consolidated statement of income.

When a hedging instrument expires or is sold, terminated or exercised, or no longer meets the criteria for hedge accounting, the Group discontinues prospectively the hedge accounting treatments. If the hedged item is a financial instrument measured at amortized cost, any adjustment to the carrying amount of the hedged item is amortized to profit or loss from the adjustment date to the maturity date using the recalculated effective interest rate at the adjustment date.

#### (iii) Hedge of net investments in foreign operations

The portion of the gain or loss on remeasurement to fair value of an instrument used to hedge a net investment in a foreign operation that is determined to be an effective hedge is recognized in other comprehensive income and accumulated separately in equity in the other reserve until the disposal of the foreign operation, at which time the cumulative gain or loss is reclassified from equity to the consolidated statement of income. The ineffective portion is recognized immediately in the consolidated statement of income. No hedge of net investment in foreign operations was hold by the Group for the year ended December 31, 2017.

#### (o) Impairment of assets

(i) Trade accounts receivable, other receivables and investment in equity securities that do not have a quoted market price in an active market are reviewed at each balance sheet date to determine whether there is objective evidence of impairment. If any such evidence exists, an impairment loss is determined and recognized.

The impairment loss is measured as the difference between the asset's carrying amount and the estimated future cash flows, discounted at the current market rate of return for a similar financial asset where the effect of discounting is material, and is recognized as an expense in the consolidated statement of income. Impairment losses for trade and other receivables are reversed through the consolidated statement of income if in a subsequent period the amount of the impairment losses decreases. Impairment losses for equity securities carried at cost are not reversed.

For investments in associates and joint ventures accounted under the equity method (Note 2(a)(ii)), the impairment loss is measured by comparing the recoverable amount of the investment as a whole with its carrying amount in accordance with the accounting policy set out in Note 2(o)(ii). The impairment loss is reversed if there has been a favorable change in the estimates used to determine the recoverable amount in accordance with the accounting policy set out in Note 2(o)(ii).

(ii) Impairment of other long-lived assets is accounted as follows:

The carrying amounts of other long-lived assets, including property, plant and equipment, construction in progress, lease prepayments and other assets, are reviewed at each balance sheet date to identify indicators that the assets may be impaired. These assets are tested for impairment whenever events or changes in circumstances indicate that their recorded carrying amounts may not be recoverable. When such a decline has occurred, the carrying amount is reduced to the recoverable amount. For goodwill, the recoverable amount is estimated at each balance sheet date.

The recoverable amount is the greater of the fair value less costs to disposal and the value in use. In determining the value in use, expected future cash flows generated by the asset are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Where an asset does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the smallest group of assets that generates cash inflows independently (i.e. a cash-generating unit).

The amount of the reduction is recognized as an expense in the consolidated statement of income. Impairment losses recognized in respect of cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to the cash-generating unit and then, to reduce the carrying amount of the other assets in the unit on a pro rata basis, except that the carrying value of an asset will not be reduced below its individual fair value less costs to disposal, or value in use, if determinable.

Management assesses at each balance sheet date whether there is any indication that an impairment loss recognized for a long-lived asset, except in the case of goodwill, in prior years may no longer exist. An impairment loss is reversed if there has been a favorable change in the estimates used to determine the recoverable amount. A subsequent increase in the recoverable amount of an asset, when the circumstances and events that led to the write-down or write-off cease to exist, is recognized as an income. The reversal is reduced by the amount that would have been recognized as depreciation had the write-down or write-off not occurred. An impairment loss in respect of goodwill is not reversed.

# (p) Trade, bills and other payables

Trade, bills and other payables are initially recognized at fair value and thereafter stated at amortized cost unless the effect of discounting would be immaterial, in which case they are stated at cost.

#### (q) Interest-bearing borrowings

Interest-bearing borrowings are recognized initially at fair value less attributable transaction costs. Subsequent to initial recognition, interest-bearing borrowings are stated at amortized cost with any difference between cost and redemption value being recognized in the consolidated statement of income over the period of borrowings using the effective interest method.

#### (r) Convertible bonds

#### (i) Convertible bonds that contain an equity component

Convertible bonds that can be converted to equity share capital at the option of the holder, where the number of shares that would be issued on conversion and the value of the consideration that would be received at that time do not vary, are accounted for as compound financial instruments that contain both a liability component and an equity component.

At initial recognition, the liability component of the convertible bonds is measured as the present value of the future interest and principal payments, discounted at the market rate of interest applicable at the time of initial recognition to similar liabilities that do not have a conversion option. Any excess of proceeds over the amount initially recognized as the liability component is recognized as the equity component. Transaction costs that relate to the issuance of the convertible bonds are allocated to the liability and equity components in proportion to the allocation of proceeds.

The liability component is subsequently carried at amortized cost. The interest expense on the liability component is calculated using the effective interest method. The equity component is recognized in the capital reserve until the bond is converted or redeemed.

If the bond is converted, the capital reserve, together with the carrying amount of the liability component at the time of conversion, is transferred to share capital and share premium as consideration for the shares issued. If the bond is redeemed, the capital reserve is transferred to share premium.

#### (ii) Other convertible bonds

Convertible bonds issued with a cash settlement option and other embedded derivative features are accounted for as compound financial instruments that contain a liability component and a derivative component.

At initial recognition, the derivative component of the convertible bonds is measured at fair value. Any excess of proceeds over the amount initially recognized as the derivative component is recognized as the liability component. Transaction costs that relate to the issuance of the convertible bonds are allocated to the liability and derivative components in proportion to the allocation of proceeds. The portion of the transaction costs relating to the liability component is recognized initially as part of the liability. The portion relating to the derivative component is recognized immediately as an expense in the consolidated statement of income.

The derivative component is subsequently remeasured at each balance sheet date and any gains or losses arising from change in the fair value are recognized in the consolidated statement of income. The liability component is subsequently carried at amortized cost until extinguished on conversion or redemption. The interest expense recognized in the consolidated statement of income on the liability component is calculated using the effective interest method. Both the liability and the related derivative components are presented together for financial statements reporting purposes (Note 39(g)).

If the convertible bonds are converted, the carrying amounts of the derivative and liability components are transferred to share capital and share premium as consideration for the shares issued. If the convertible bonds are redeemed, any difference between the amount paid and the carrying amounts of both components is recognized in the consolidated statement of income.

#### (s) Provisions and contingent liability

A provision is recognized for liability of uncertain timing or amount when the Group has a legal or constructive obligation arising as a result of a past event, when it is probable that an outflow of economic benefits will be required to settle the obligation and a reliable estimate can be made.

When it is not probable that an outflow of economic benefits will be required, or the amount cannot be estimated reliably, the obligation is disclosed as a contingent liability, unless the probability of outflow of economic benefits is remote. Possible obligations, whose existence will only be confirmed by the occurrence or non-occurrence of one or more future events are also disclosed as contingent liabilities unless the probability of outflow of economic benefits is remote.

Provisions for future dismantlement costs are initially recognized based on the present value of the future costs expected to be incurred in respect of the Group's expected dismantlement and abandonment costs at the end of related oil and gas exploration and development activities. Any subsequent change in the present value of the estimated costs, other than the change due to passage of time which is regarded as interest cost, is reflected as an adjustment to the provision and oil and gas properties.

#### (t) Revenue recognition

Revenues associated with the sale of crude oil, natural gas, petroleum and chemical products and ancillary materials are recorded when the customer accepts the goods and the significant risks and rewards of ownership and title have been transferred to the buyer. Revenue from the rendering of services is recognized in the consolidated statement of income upon performance of the services. No revenue is recognized if there are significant uncertainties regarding recovery of the consideration due, the possible return of goods, or when the amount of revenue and the costs incurred or to be incurred in respect of the transaction cannot be measured reliably.

Interest income is recognized on a time apportioned basis that takes into account the effective yield on the asset.

A government grant that becomes receivable as compensation for expenses or losses already incurred with no future related costs is recognized as income in the period in which it becomes receivable.

#### (u) Borrowing costs

Borrowing costs are expensed in the consolidated statements of income in the period in which they are incurred, except to the extent that they are capitalized as being attributable to the construction of an asset which necessarily takes a period of time to get ready for its intended use.

#### (v) Repairs and maintenance expenditure

Repairs and maintenance expenditure is expensed as incurred.

#### (w) Environmental expenditures

Environmental expenditures that relate to current ongoing operations or to conditions caused by past operations are expensed as incurred.

Liabilities related to future remediation costs are recorded when environmental assessments and/or cleanups are probable and the costs can be reliably estimated. As facts concerning environmental contingencies become known to the Group, the Group reassesses its position both with respect to accrued liabilities and other potential exposures.

#### (x) Research and development expense

Research and development expenditures that cannot be capitalized are expensed in the period in which they are incurred. Research and development expense amounted to RMB 5,654, RMB 5,941 and RMB 6,423 for the years ended December 31, 2015, 2016 and 2017, respectively.

#### (y) Operating leases

Operating lease payments are charged to the consolidated statement of income on a straight-line basis over the period of the respective leases.

#### (z) Employee benefits

The contributions payable under the Group's retirement plans are recognized as an expense in the consolidated statement of income as incurred and according to the contribution determined by the plans. Further information is set out in Note 33.

Termination benefits, such as employee reduction expenses, are recognized when, and only when, the Group demonstrably commits itself to terminate employment or to provide benefits as a result of voluntary redundancy by having a detailed formal plan which is without realistic possibility of withdrawal.

# (aa) Income tax

Income tax comprises current and deferred tax. Current tax is calculated on taxable income by applying the applicable tax rates. Deferred tax is provided using the balance sheet liability method on all temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes only to the extent that it is probable that future taxable income will be available against which the assets can be utilized. Deferred tax is calculated on the basis of the enacted tax rates or substantially enacted tax rates that are expected to apply in the period when the asset is realized or the liability is settled. The effect on deferred tax of any changes in tax rates is charged or credited to the consolidated statement of income, except for the effect of a change in tax rate on the carrying amount of deferred tax assets and liabilities which were previously charged or credited to other comprehensive income or directly in equity.

The tax value of losses expected to be available for utilization against future taxable income is set off against the deferred tax liability within the same legal tax unit and jurisdiction to the extent appropriate, and is not available for set off against the taxable profit of another legal tax unit. The carrying amount of a deferred tax asset is reviewed at each balance sheet date and is reduced to the extent that it is no longer probable that the related tax benefit will be realized.

#### (bb) Dividends

Dividends and distributions of profits proposed in the profit appropriation plan which will be authorized and declared after the balance sheet date, are not recognized as a liability at the balance sheet date and are separately disclosed in the notes to the financial statements. Dividends are recognized as a liability in the period in which they are declared.

#### (cc) Segment reporting

Operating segments, and the amounts of each segment item reported in the consolidated financial statements, are identified from the financial information provided regularly to the Group's chief operating decision maker for the purposes of allocating resources to, and assessing the performance of the Group's various lines of business.

#### 3. OTHER OPERATING REVENUES

|                                       | Yea       | Years ended December 31, |        |  |  |
|---------------------------------------|-----------|--------------------------|--------|--|--|
|                                       | 2015 2016 | 2016                     | 2017   |  |  |
|                                       | RMB       | RMB                      | RMB    |  |  |
|                                       |           |                          |        |  |  |
| Sale of materials, service and others | 41,524    | 49,812                   | 58,930 |  |  |
| Rental income                         | 974       | 909                      | 793    |  |  |
|                                       | 42,498    | 50,721                   | 59,723 |  |  |

#### 4. SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

The following items are included in selling, general and administrative expenses:

|      | Years ended December 31, |                                 |  |  |  |
|------|--------------------------|---------------------------------|--|--|--|
|      | 2015                     | 2016                            | 2017   |  |  |
|      | RMB                      | RMB                             | RMB  |  |  |
|      | 14,384                   | 14,410                          | 12,104   |  |  |
|      |                          |                                 |  |  |  |
|      | 40                       | 230                             | (51)   |  |  |
|      | 49                       | (12)                            | 159  |  |  |
|      | (25)                     | 13                              | 2  |  |  |
| F-24 |                          |                                 |  |  |  |
|      | E 24                     | 2015<br>RMB  14,384  40 49 (25) | 2015         2016           RMB         RMB           14,384         14,410           40         230           49         (12)           (25)         13 |  |  |

#### 5. PERSONNEL EXPENSES

|   | Yea    | Years ended December 31, |        |  |  |
|---|--------|--------------------------|--------|--|--|
|   | 2015   | 2016                     | 2017   |  |  |
|   | RMB    | RMB                      | RMB    |  |  |
|   |        |                          |        |  |  |
| Salaries, wages and other benefits            | 48,741 | 55,502                   | 65,873 |  |  |
| Contributions to retirement schemes (Note 33) | 7,878  | 8,385                    | 8,981  |  |  |
|   | 56,619 | 63,887                   | 74,854 |  |  |

# 6. TAXES OTHER THAN INCOME TAX

|                            | Years ended December 31, |                |         |  |
|----------------------------|--------------------------|----------------|---------|--|
|                            | 2015                     | 2016           | 2017    |  |
|                            | RMB                      | RMB            | RMB     |  |
| Consumption tax (i)        | 198,754                  | 193,836        | 192,907 |  |
| Special oil income levy    | 6                        | ´ <del>_</del> | 8       |  |
| City construction tax (ii) | 18,195                   | 18,155         | 18,274  |  |
| Education surcharge        | 13,686                   | 13,695         | 13,811  |  |
| Resources tax              | 4,853                    | 3,871          | 4,841   |  |
| Other                      | 855                      | 2,449          | 5,451   |  |
|                            | 236,349                  | 232,006        | 235,292 |  |

Note:

(i) Consumption tax was levied based on sales quantities of taxable products, tax rate of products is presented as below:

| Products      | Effective from<br>December 13,<br>2014<br>RMB/Ton | Effective from<br>January 13,<br>2015<br>RMB/Ton |
|---------------|---|--|
| Gasoline      | 1,943.20  | 2,109.76   |
| Diesel        | 1,293.60  | 1,411.20   |
| Naphtha       | 1,939.00  | 2,105.20   |
| Solvent oil   | 1,794.80  | 1,948.64   |
| Lubricant oil | 1,576.40  | 1,711.52   |
| Fuel oil      | 1,116.50  | 1,218.00   |
| Jet fuel oil  | 1,370.60  | 1,495.20   |

(ii) City construction tax is levied on an entity based on its total paid amount of value-added tax, consumption tax and business tax. Pursuant to the 'Circular on the Overall Promotion of Pilot Program of Levying VAT in place of Business Tax'(Cai Shui [2016] 36) jointly issued by the Ministry of Finance and the State Administration of Taxation, revenue from modern service of the subsidiaries of the Group, are subject to VAT from May 1, 2016, and the applicable tax rate is 6%. Before May 1, 2016, revenue from modern service of the subsidiaries of the Group, are subject to the business tax with a tax rate of 3% to 5%.

#### 7. OTHER OPERATING (EXPENSE)/INCOME, NET

|  | Years ended December 31, |           |          |
|--|--------------------------|-----------|----------|
|  | 2015                     | 2016      | 2017     |
|  | RMB                      | RMB       | RMB      |
|  |                          | / · = - · | (2.2)    |
| Fines, penalties and compensations                                       | (90)                     | (152)     | (89)     |
| Donations  | (112)                    | (133)     | (152)    |
| Loss on disposal of property, plant, equipment and other non-currents    |                          |           |          |
| assets, net  | (692)                    | (1,489)   | (1,518)  |
| Impairment losses on long-lived assets (Note i)                          | (5,146)                  | (16,425)  | (21,258) |
| Net realized and unrealized gain on derivative financial instruments not |                          |           |          |
| qualified as hedging   | 870                      | 195       | (909)    |
| Ineffective portion of change in fair value of cash flow hedges          | 165                      | 304       | (813)    |
| Government grants (Note ii)  | 5,131                    | 4,101     | 4,893    |
| Gain on dilution and remeasurement of interests in the Pipeline Ltd      | _                        | 20,562    |          |
| Gain on remeasurement of interests in the Shanghai SECCO (Note 31)       | _                        | _         | 3,941    |
| Others   | (255)                    | (1,277)   | (649)    |
|  | (129)                    | 5,686     | (16,554) |

Note:

Impairment losses recognized on long-term assets of the exploration and production ("E&P") segments were RMB 4,864, RMB 11,605 and RMB 13,556 for the years ended December 31, 2015, 2016 and 2017, respectively. The impairment comprised RMB 4,213, RMB 10,594 and RMB 12,611 on property, plant and equipment for the three years respectively, RMB 651 on investment in associates for the year ended December 31, 2015, RMB 907 on investment in joint venture for the year ended December 31, 2017, RMB 1,005 and RMB 21 on construction in progress for the years ended December 31, 2016 and 2017, RMB 6 on goodwill for the year ended December 31, 2016, and RMB 17 on available for sale financial assets for the year ended December 31, 2017. The primary factors resulting in the E&P segment impairment loss for the years ended December 31, 2016 and 2017 were downward revision of oil and gas reserve due to price change and high operating and development cost for certain oil fields. The carrying values of these E&P properties were written down to respective recoverable amounts which were determined based on the present values of the expected future cash flows of the asset using a pre-tax discount rate of 10.80%, 10.47% and 10.47% for the years ended December 31, 2015, 2016 and 2017, respectively. Further future downward revisions to the Group's oil price would lead to further impairments which, in aggregate, are likely to be material. It is estimated that a general decrease of 5% in oil price, with all other variables held constant, would result in additional impairment loss on the Group's properties, plant and equipment relating to oil and gas producing activities by approximately RMB 3,145. It is estimated that a general increase of 5% in operating cost, with all other variables held constant, would result in additional impairment loss on the Group's properties, plant and equipment relating to oil and gas producing activities by approximately RMB 2,659. It is estimated that a general increase of 5% in discount rate, with all other variables held constant, would result in additional impairment loss on the Group's properties, plant and equipment relating to oil and gas producing activities by approximately RMB 461. The primary factors resulting in the E&P segment impairment losses for the years ended December 31, 2015 were unsuccessful development drilling and high operating and development costs for certain oil fields.

Impairment losses recognized for the chemicals segment were RMB 142, RMB 2,898 and RMB 4,922 for the years ended December 31, 2015, 2016 and 2017, respectively, and comprised of impairment losses of RMB 142, RMB 2,840 and RMB 4,779 on property, plant and equipment for the years ended December 31, 2015, 2016 and 2017, respectively, and RMB 58 and RMB 143 on construction in progress for the years ended December 31, 2016 and 2017, respectively. Impairment losses recognized for the refining segment were RMB 9, RMB 1,655 and RMB 1,894 for the years ended December 31, 2015, 2016 and 2017, respectively, and comprised of impairment losses of RMB 9, RMB 1,245 and RMB 1,836 on property, plant and equipment for the years ended December 31, 2015, 2016 and 2017, respectively, RMB 410 and RMB 47 on construction in progress for the years ended December 31, 2016 and 2017, respectively, RMB 1 on intangible assets and RMB 10 for investment in associates for the year ended December 31, 2017. These impairment losses relate to certain refining and chemicals production facilities that are held for use for the years ended December 31, 2015, 2016 and 2017. The carrying values of these facilities were written down to their recoverable amounts that were primarily determined based on the asset held for use model using the present value of estimated future cash flows of the production facilities using the pre-tax discount rates for the years ended December 31, 2015, 2016 and 2017, respectively. The primary factor resulting in the impairment losses on long-lived assets of the refining for the years ended December 31, 2015, 2016 and 2017, and of the chemicals segment for the year ended December 31, 2015 and 2016 was due to the suspension of operations of certain production facilities. Evidence indicates the economic performance of certain production facilities are worse than expected also contributed to the written down of assets in the chemical segments for the year ended December 31, 2017.

Impairment losses recognized on long-lived assets of the marketing and distribution segment were RMB 19, RMB 267 and RMB 675 for the years ended December 31, 2015, 2016 and 2017 respectively. The impairment comprised of impairment losses of RMB 10, RMB 242 and RMB 597 on property, plant and equipment for the years ended December 31, 2015, 2016 and 2017, respectively, impairment losses of RMB 2, RMB 1 and RMB 19 on investments in associates and joint ventures for the years ended December 31, 2015, 2016 and 2017, respectively, impairment losses of RMB 13 and RMB 41 on construction in progress for the year ended December 31, 2016 and 2017, impairment losses of RMB 7, RMB 11 and RMB 12 on lease prepayments for the year ended December 31, 2015, 2016 and 2017, and impairment losses of RMB 6 on intangible assets for the year ended December 31, 2017, primarily relate to certain service stations and certain construction in progress that were closed or abandoned during respective years. In measuring the amounts of impairment charges, the carrying amounts of these assets were compared to the present value of the expected future cash flows of the assets, as well as information about sales and purchases of similar properties in the same geographic area.

Impairment loss recognized on long-lived assets of the corporate and others segment was RMB 112 and RMB 211 for the years ended December 31, 2015 and 2017. The impairment comprised of impairment loss of RMB 1 and RMB 13 on property, plant and equipment for the years ended December 31, 2015 and 2017, impairment of RMB 111 on construction in progress for the year ended December 31, 2015, and impairment of RMB 198 on goodwill for the year ended December 31, 2017.

(ii) Government grants for the years ended December 31, 2015, 2016 and 2017 primarily represent financial appropriation income and non-income tax refunds received from respective government agencies without conditions or other contingencies attached to the receipts of the grants.

# 8. INTEREST EXPENSE

|   | Years ended December 31, |                |                |  |
|---|--------------------------|----------------|----------------|--|
|   | 2015                     | 2016           | 2017           |  |
|   | RMB                      | RMB            | RMB            |  |
| Interest expense incurred   | 8,273                    | 9,021          | 6,368          |  |
| Less: Interest expense capitalized*   | (1,221)                  | (859)          | (723)          |  |
|   | 7,052                    | 8,162          | 5,645          |  |
| Accretion expenses (Note 28)  | 1,081                    | 1,057          | 1,501          |  |
| Interest expense  | 8,133                    | 9,219          | 7,146          |  |
|   |                          |                |                |  |
| * Interest rates per annum at which borrowing costs were capitalized for construction in progress | 2.6% to 5.9%             | 2.65% to 4.82% | 2.37% to 4.41% |  |
|   |                          |                |                |  |

#### 9. TAX EXPENSE

Tax expense in the consolidated statement of income represents:

|                             | Year    | Years ended December 31, |          |  |
|-----------------------------|---------|--------------------------|----------|--|
|                             | 2015    | 2016                     | 2017     |  |
|                             | RMB     | RMB                      | RMB      |  |
| Current tax                 |         |                          |          |  |
| - Provision for the year    | 13,677  | 21,313                   | 26,668   |  |
| - Adjustment of prior years | 279     | 228                      | (72)     |  |
| Deferred taxation (Note 22) | (1,343) | (834)                    | (10,317) |  |
|                             | 12,613  | 20,707                   | 16,279   |  |

Reconciliation between actual income tax expense and the expected income tax expense at applicable statutory tax rates is as follows:

|   | Years ended December 31, |         |         |
|---|--------------------------|---------|---------|
|   | 2015                     | 2016    | 2017    |
|   | RMB                      | RMB     | RMB     |
| Earnings before income tax  | 56,411                   | 80,151  | 86,697  |
| Expected PRC income tax expense at a statutory tax rate of 25%      | 14,103                   | 20,038  | 21,674  |
| Tax effect of preferential tax rate (Note i)                        | (1,033)                  | 83      | (793)   |
| Effect of income taxes at foreign operations (Note ii)              | 391                      | 299     | (1,394) |
| Tax effect of non-deductible expenses                               | 788                      | 1,529   | 1,905   |
| Tax effect of non-taxable income                                    | (2,583)                  | (2,786) | (5,939) |
| Tax effect of utilization of previously unrecognized tax losses and |                          |         |         |
| temporary differences   | (235)                    | (453)   | (613)   |
| Tax effect of tax losses not recognized                             | 828                      | 958     | 1,485   |
| Write-down of deferred tax assets                                   | 75                       | 811     | 26      |
| Adjustment of prior years   | 279                      | 228     | (72)    |
| Actual income tax expense   | 12,613                   | 20,707  | 16,279  |

# Note:

- (i) The provision for PRC current income tax is based on a statutory income tax rate of 25% of the assessable income of the Group as determined in accordance with the relevant income tax rules and regulations of the PRC, except for certain entities of the Group in western regions in the PRC are taxed at preferential income tax rate of 15% through the year 2020.
- (ii) It is mainly due to the foreign operation in the Republic of Angola ("Angola") calculated the assessable income in accordance with the relevant income tax rules and regulations of Angola, and taxed at 50% of the assessable income as determined.

#### 10. OTHER COMPREHENSIVE INCOME

|  |                      |               |                      | Years en             | ded Decemb    | er 31,               |                      |               |                      |
|--|----------------------|---------------|----------------------|----------------------|---------------|----------------------|----------------------|---------------|----------------------|
|  |                      | 2015          |                      |                      | 2016          |                      |                      | 2017          |                      |
|  | Before-tax<br>amount | Tax<br>effect | Net-of-tax<br>amount | Before-tax<br>amount | Tax<br>effect | Net-of-tax<br>amount | Before-tax<br>amount | Tax<br>effect | Net-of-tax<br>amount |
|  | RMB                  | RMB           | RMB                  | RMB                  | RMB           | RMB                  | RMB                  | RMB           | RMB                  |
| Cash flow hedges:                              |                      |               |                      |                      |               |                      |                      |               |                      |
| Effective portion of changes in fair           |                      |               |                      |                      |               |                      |                      |               |                      |
| value of hedging instruments                   |                      |               |                      |                      |               |                      |                      |               |                      |
| recognized during the year                     | 2,881                | (405)         | 2,476                | (3,813)              | 652           | (3,161)              | (1,314)              | 240           | (1,074)              |
| Amounts transferred to initial carrying        |                      |               |                      |                      |               |                      |                      |               |                      |
| amount of hedged items                         | (1,354)              | 223           | (1,131)              | 13                   | (2)           | 11                   | (4)                  | 1             | (3)                  |
| Amounts transferred to the                     |                      |               |                      |                      |               |                      |                      |               |                      |
| consolidated statement of income               | 2,273                | (455)         | 1,818                | 6,279                | (1,115)       | 5,164                | (575)                | 72            | (503)                |
| Net movement during the year                   |                      |               |                      |                      |               |                      |                      |               |                      |
| recognized in other                            |                      |               |                      |                      |               |                      |                      |               |                      |
| comprehensive income                           | 3,800                | (637)         | 3,163                | 2,479                | (465)         | 2,014                | (1,893)              | 313           | (1,580)              |
| Available-for-sale securities:                 |                      |               |                      |                      |               |                      |                      |               |                      |
| Changes in fair value recognized               |                      | <b>40</b>     |                      | (1.5)                | (=)           | ( <b>2.1</b> )       | (5 <b>5</b> )        |               | (55)                 |
| during the year                                | 66                   | (4)           | 62                   | (17)                 | (7)           | (24)                 | (57)                 |               | (57)                 |
| Net movement during the year                   |                      |               |                      |                      |               |                      |                      |               |                      |
| recognized in other                            | 66                   | (4)           | 62                   | (17)                 | (7)           | (24)                 | (57)                 |               | (57)                 |
| comprehensive income                           |                      | (4)           |                      | (17)                 | <u>(/</u> )   | (24)                 | <u>(57)</u>          |               | <u>(57</u> )         |
| Share of other comprehensive                   |                      |               |                      |                      |               |                      |                      |               |                      |
| (loss)/profit of associates and joint ventures | (5,356)              |               | (5,356)              | 45                   |               | 45                   | 1,053                |               | 1,053                |
|  | (3,330)              | _             | (3,330)              | 43                   | _             | 43                   | 1,033                | _             | 1,033                |
| Foreign currency translation differences       | 2,268                |               | 2,268                | 4,298                | _             | 4,298                | (3,792)              | _             | (3,792)              |
| Other comprehensive income                     | 778                  | (641)         | 137                  | 6,805                | (472)         | 6,333                | (4,689)              | 313           | (4,376)              |
| o  |                      | (041)         | 137                  | 0,003                | (4/2)         | 0,555                | (4,007)              | 313           | (4,570)              |

#### 11. BASIC AND DILUTED EARNINGS PER SHARE

The calculation of basic earnings per share for the years ended December 31, 2015, 2016 and 2017 is based on the net income attributable to ordinary owners of the Company of RMB 32,512, RMB 46,672 and RMB 51,244, respectively, and the weighted average number of shares of 120,852,547,200, 121,071,209,646 and 121,071,209,646, respectively.

The calculation of diluted earnings per share for the years ended December 31, 2015, 2016 and 2017 is based on the net income attributable to ordinary owners of the Company (diluted) of RMB 32,510, RMB 46,669 and RMB 51,242, respectively, and the weighted average number of shares (diluted) of 120,852,547,200, 121,071,209,646 and 121,071,209,646, respectively, calculated as follows:

# (i) Net income attributable to ordinary owners of the Company (diluted)

|   | 2015   | 2016   | 2017   |
|---|--------|--------|--------|
|   | RMB    | RMB    | RMB    |
| Net income attributable to ordinary owners of the Company           | 32,512 | 46,672 | 51,244 |
| After tax effect of employee share option scheme of Shanghai        |        |        |        |
| Petrochemical   | (2)    | (3)    | (2)    |
| Net income attributable to ordinary owners of the Company (diluted) | 32,510 | 46,669 | 51,242 |

# (ii) Weighted average number of shares (diluted)

|   | 2015<br>Number of | 2016<br>Number of | 2017<br>Number of |
|---|-------------------|-------------------|-------------------|
|   | shares            | shares            | shares            |
| Weighted average number of shares as of December 31           | 120,852,547,200   | 121,071,209,646   | 121,071,209,646   |
| Weighted average number of shares (diluted) as of December 31 | 120,852,547,200   | 121,071,209,646   | 121,071,209,646   |

#### 12. FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

|                    | Decer | nber 31, |
|--------------------|-------|----------|
|                    | 2016  | 2017     |
|                    | RMB   | RMB      |
| Current assets     |       |          |
| Structured deposit |       | 51,196   |
|                    |       | 51,196   |

The financial assets are the structured deposit with financial institution and cannot be readily convertible to known amounts of cash, which are presented as current assets since they are expected to be expired within 12 months from the end of the reporting period.

The changes in the financial assets at fair value through profit or loss for the years ended December 31, 2016 and 2017 amounted to RMB nil and RMB 196, respectively, which has been recorded in other operating (expense)/income, net.

#### 13. TRADE ACCOUNTS RECEIVABLE, NET

|  | December 31, |        |  |
|--|--------------|--------|--|
|  | 2016         | 2017   |  |
|  | RMB          | RMB    |  |
| Amounts due from third parties                                 | 39,994       | 56,203 |  |
| Amounts due from Sinopec Group Company and fellow subsidiaries | 6,398        | 7,941  |  |
| Amounts due from associates and joint ventures                 | 4,580        | 4,962  |  |
|  | 50,972       | 69,106 |  |
| Less: Impairment losses for bad and doubtful debts             | (683)        | (612)  |  |
| Trade accounts receivable, net                                 | 50,289       | 68,494 |  |

Impairment losses for bad and doubtful debts are analyzed as follows:

|                           | 2015 | 2016     | 2017  |
|---------------------------|------|----------|-------|
|                           | RMB  | RMB      | RMB   |
|                           |      |          |       |
| Balance as of January 1   | 530  | 525      | 683   |
| Provision for the year    | 40   | 238      | 49    |
| Written back for the year | (13) | (8)      | (100) |
| Written off for the year  | (38) | (72)     | (21)  |
| Others                    | 6    | <u> </u> | 1     |
| Balance as of December 31 | 525  | 683      | 612   |

Sales are generally on a cash term. Credit is generally only available for major customers with well-established trading records. Amounts due from Sinopec Group Company and fellow subsidiaries are repayable under the same terms.

Trade accounts receivable (net of impairment losses for bad and doubtful debts) primarily represents receivables that are neither past due nor impaired. These receivables relate to a wide range of customers for whom there is no recent history of default.

#### 14. INVENTORIES

|  | Decemb  | er 31,  |
|--|---------|---------|
|  | 2016    | 2017    |
|  | RMB     | RMB     |
| Crude oil and other raw materials                      | 75,680  | 85,975  |
| Work in progress                                       | 14,141  | 14,774  |
| Finished goods   | 65,772  | 84,448  |
| Spare parts and consumables                            | 1,838   | 2,651   |
|  | 157,431 | 187,848 |
| Less: Allowance for diminution in value of inventories | (920)   | (1,155) |
|  | 156,511 | 186,693 |

Allowance for diminution in value of inventories is analyzed as follows:

|                                   | 2015    | 2016    | 2017  |
|-----------------------------------|---------|---------|-------|
|                                   | RMB     | RMB     | RMB   |
|                                   | 2 (02   | 4.402   | 000   |
| Balance as of January 1           | 3,603   | 4,402   | 920   |
| Allowance for the year            | 3,687   | 430     | 436   |
| Reversal of allowance on disposal | (34)    | (10)    | (13)  |
| Written off                       | (2,931) | (4,021) | (190) |
| Other increase                    | 77      | 119     | 2     |
| Balance as of December 31         | 4,402   | 920     | 1,155 |

During the years ended December 31, 2015, 2016 and 2017, costs of inventories recognized as an expense in the consolidated statement of income were RMB 1,572,798, RMB 1,461,285, and RMB 1,854,629, respectively. Such costs include the write-down of inventories of RMB 3,687, RMB 430, and RMB 436, respectively, and the reversal of write-down of inventories of RMB 34, RMB 10 and RMB 13, respectively. The write-down of inventories and the reversal of write-down of inventories were recorded in purchased crude oil, products and operating supplies and expenses in the consolidated statement of income. The write-down of inventories which were realized primarily with the sales of inventories for the year ended December 31, 2015, 2016 and 2017 were RMB 2,931, RMB 4,021and RMB 190. The write-down of inventories for the year ended December 31, 2017 is mainly related to the spare parts and consumables in refining segment and chemical segment.

# 15. PREPAID EXPENSES AND OTHER CURRENT ASSETS

|                                      | Decem  | ber 31, |
|--------------------------------------|--------|---------|
|                                      | 2016   | 2017    |
|                                      | RMB    | RMB     |
| Other receivables                    | 26,056 | 17,704  |
| Advances to suppliers                | 3,749  | 4,901   |
| Value-added input tax to be deducted | 18,055 | 17,926  |
| Prepaid income tax                   | 1,145  | 398     |
| Derivative financial instruments     | 762    | 526     |
|                                      | 49,767 | 41,455  |
| F 21                                 |        |         |

# 16. PROPERTY, PLANT AND EQUIPMENT

|  | Plants and buildings RMB | Oil and gas properties RMB | Equipment,<br>machinery<br>and others | Total<br>RMB |
|--|--------------------------|----------------------------|---------------------------------------|--------------|
| Cost:  |                          |                            |                                       |              |
| Balance as of January 1, 2016                                    | 107,873                  | 613,134                    | 880,711                               | 1,601,718    |
| Additions  | 277                      | 3,420                      | 626                                   | 4,323        |
| Transferred from construction in progress                        | 5,901                    | 31,473                     | 50,025                                | 87,399       |
| Reclassifications  | 1,426                    | (115)                      | (1,311)                               | _            |
| Reclassification to lease prepayments and other long-term assets | (130)                    |                            | (2,202)                               | (2,332)      |
| Disposals  | (509)                    | (27)                       | (35,100)                              | (35,636)     |
| Exchange adjustments   | 82                       | 2,800                      | 187                                   | 3,069        |
| Balance as of December 31, 2016                                  | 114,920                  | 650,685                    | 892,936                               | 1,658,541    |
|  |                          |                            |                                       |              |
| Balance as of January 1, 2017                                    | 114,920                  | 650,685                    | 892,936                               | 1,658,541    |
| Additions  | 854                      | 1,627                      | 11,983                                | 14,464       |
| Transferred from construction in progress                        | 6,789                    | 19,881                     | 54,605                                | 81,275       |
| Reclassifications  | (673)                    | (50)                       | 723                                   | _            |
| Reclassification to lease prepayments and other long-term assets | (859)                    | (1,702)                    | (8,751)                               | (11,312)     |
| Disposals  | (878)                    | (211)                      | (10,985)                              | (12,074)     |
| Exchange adjustments   | (140)                    | (2,573)                    | (199)                                 | (2,912)      |
| Balance as of December 31, 2017                                  | 120,013                  | 667,657                    | 940,312                               | 1,727,982    |
|  |                          | _                          |                                       |              |
| Accumulated depreciation:  |                          |                            |                                       |              |
| Balance as of January 1, 2016                                    | 44,469                   | 374,191                    | 449,609                               | 868,269      |
| Depreciation for the year  | 3,815                    | 49,005                     | 47,914                                | 100,734      |
| Impairment losses for the year                                   | 440                      | 10,580                     | 3,901                                 | 14,921       |
| Reclassifications  | 369                      | (58)                       | (311)                                 |              |
| Reclassification to lease prepayments and other long-term assets | (14)                     | <del></del>                | (316)                                 | (330)        |
| Written back on disposals  | (534)                    | (22)                       | (17,067)                              | (17,623)     |
| Exchange adjustments   | 27                       | 1,865                      | 84                                    | 1,976        |
| Balance as of December 31, 2016                                  | 48,572                   | 435,561                    | 483,814                               | 967,947      |
|  |                          |                            |                                       |              |
| Balance as of January 1, 2017                                    | 48,572                   | 435,561                    | 483,814                               | 967,947      |
| Depreciation for the year  | 4,075                    | 55,057                     | 46,585                                | 105,717      |
| Impairment losses for the year                                   | 554                      | 8,832                      | 10,450                                | 19,836       |
| Reclassifications  | (122)                    | (77)                       | 199                                   | (4.225)      |
| Reclassification to lease prepayments and other long-term assets | (238)                    | (1,305)                    | (2,682)                               | (4,225)      |
| Written back on disposals  | (584)                    | (195)                      | (9,079)                               | (9,858)      |
| Exchange adjustments   | (57)                     | (2,056)                    | (96)                                  | (2,209)      |
| Balance as of December 31, 2017                                  | 52,200                   | 495,817                    | 529,191                               | 1,077,208    |
| Net book value:  |                          |                            |                                       |              |
| Balance as of January 1, 2016                                    | 63,404                   | 238,943                    | 431,102                               | 733,449      |
| Balance as of December 31, 2016                                  | 66,348                   | 215,124                    | 409,122                               | 690,594      |
| Balance as of December 31, 2017                                  | 67,813                   | 171,840                    | 411,121                               | 650,774      |

# Note:

The additions to the oil and gas properties of the Group for the years ended December 31, 2016 and 2017 included RMB 3,420 and RMB 1,627 respectively, of the estimated dismantlement costs for site restoration (Note 28).

# 17. CONSTRUCTION IN PROGRESS

|  | 2016<br>RMB | 2017<br>RMB |
|--|-------------|-------------|
| Balance as of January 1  | 152,325     | 129,581     |
| Additions  | 81,837      | 85,552      |
| Dry hole costs written off                                       | (7,467)     | (6,876)     |
| Transferred to property, plant and equipment                     | (87,399)    | (81,229)    |
| Reclassification to lease prepayments and other long-term assets | (6,900)     | (7,773)     |
| Impairment losses for the year                                   | (1,486)     | (252)       |
| Disposals  | (1,445)     | (315)       |
| Exchange adjustments   | 116         | (43)        |
| Balance as of December 31  | 129,581     | 118,645     |

Net changes in capitalized cost of exploratory wells included in the Group's construction in progress in the E&P segment are analyzed as follows:

|   | 2015<br>RMB | 2016<br>RMB | 2017<br>RMB |
|---|-------------|-------------|-------------|
| At beginning of year  | 19,286      | 16,772      | 12,192      |
| Additions, net of amount that were capitalized and subsequently expensed in | ,           | ,           | ,           |
| the same year, pending the determination of proved reserves                 | 5,901       | 6,321       | 5,567       |
| Transferred to oil and gas properties based on the determination of proved  |             |             |             |
| reserves  | (2,615)     | (3,716)     | (1,839)     |
| Dry hole costs written off  | (5,800)     | (7,185)     | (6,183)     |
| At end of year  | 16,772      | 12,192      | 9,737       |

Aging of capitalized exploratory well costs based on the date the drilling was completed are analyzed as follows:

|                  | December 31, |        |       |  |
|------------------|--------------|--------|-------|--|
|                  | 2015         | 2016   | 2017  |  |
|                  | RMB          | RMB    | RMB   |  |
|                  |              |        |       |  |
| One year or less | 8,074        | 4,731  | 4,917 |  |
| Over one year    | 8,698        | 7,461  | 4,820 |  |
|                  | 16,772       | 12,192 | 9,737 |  |

Capitalized exploratory wells costs aged over one year are related to wells for which the drilling results are being further evaluated or the development plans are being formulated.

The geological and geophysical costs paid during the years ended December 31, 2015, 2016 and 2017 amounted to RMB 4,347, RMB 2,899 and RMB 3,710, respectively.

#### 18. GOODWILL

|                                     | Decembe | r 31,   |
|-------------------------------------|---------|---------|
|                                     | 2016    | 2017    |
|                                     | RMB     | RMB     |
|                                     |         |         |
| Cost                                | 14,016  | 16,495  |
| Less: accumulated impairment losses | (7,663) | (7,861) |
|                                     | 6,353   | 8,634   |

#### Impairment tests for cash-generating units containing goodwill

Goodwill is allocated to the following Group's cash-generating units:

|  |   | Decemb | er 31, |
|--|---|--------|--------|
|  | Principal activities  | 2016   | 2017   |
|  |   | RMB    | RMB    |
| Sinopec Beijing Yanshan Petrochemical Branch ("Sinopec Yanshan")         | Manufacturing of intermediate petrochemical products and petroleum products | 1,157  | 1,004  |
| Sinopec Zhenhai Refining and Chemical Branch ("Sinopec Zhenhai")         | Manufacturing of intermediate petrochemical products and petroleum products | 4,043  | 4,043  |
| Shanghai SECCO Petrochemical Company Limited ("Shanghai SECCO")(Note 31) | Production and sale of petrochemical products                               | _      | 2,541  |
| Sinopec (Hong Kong) Limited  | Trading of petrochemical products   | 941    | 879    |
| Multiple units without individually significant goodwill                 |   | 212    | 167    |
|  |   | 6,353  | 8,634  |

Goodwill represents the excess of the cost of purchase over the fair value of the underlying assets and liabilities. The recoverable amounts of the above cash-generating units are determined based on value in use calculations. These calculations use cash flow projections based on financial budgets approved by management covering a one-year period and pre-tax discount rates primarily ranging from 10.4% to 11.0% and 10.8% to 11.4% for the years ended December 31, 2016 and 2017, respectively. Cash flows beyond the one-year period are maintained constant. Based on the estimated recoverable amount, no major impairment loss was recognized.

Key assumptions used for cash flow forecasts for these entities are the gross margin and sales volume. Management determined the budgeted gross margin based on the gross margin achieved in the period immediately before the budget period and management's expectation on the future trend of the prices of crude oil and petrochemical products. The sales volume was based on the production capacity and/or the sales volume in the period immediately before the budget period.

# 19. INTEREST IN ASSOCIATES

The Group's investments in associates are with companies primarily engaged in the oil and gas, petrochemical, and marketing and distribution operations in the PRC.

The Group's principal associates are as follows:

| Name of company  | Form of business structure | Particulars<br>of issued<br>and paid<br>up capital | Percentage<br>of equity<br>held by the<br>Company | Percentage<br>of equity<br>held by the<br>Company's<br>subsidiaries | Principal<br>activities   | Country of incorporation     | Principal place<br>of business   |
|--|----------------------------|--|---|---|---|------------------------------|----------------------------------|
| Sinopec Sichuan to<br>East China Gas<br>Pipeline Co., Ltd.<br>("Pipeline Ltd")             | Incorporated               | Registered<br>capital<br>RMB 200<br>million        | _   | 50.00   | Operation of<br>natural gas<br>pipelines and<br>auxiliary<br>facilities | PRC                          | PRC                              |
| Sinopec Finance<br>Company Limited<br>("Sinopec<br>Finance")                               | Incorporated               | Registered<br>capital<br>RMB<br>18,000<br>million  | 49.00   | _   | Provision of non-<br>banking<br>financial<br>services                   | PRC                          | PRC                              |
| PAO SIBUR<br>Holding<br>("SIBUR")  | Incorporated               | Registered<br>capital<br>RUB<br>21,784<br>million  | _   | 10.00   | Processing natural gas and manufacturing petrochemical products         | Russia                       | Russia                           |
| Zhongtian Synergetic<br>Energy Company<br>Limited<br>("Zhongtian<br>Synergetic<br>Energy") | Incorporated               | Registered<br>capital<br>RMB<br>17,516<br>million  | _   | 38.75   | Mining coal and<br>manufacturing<br>of coal-<br>chemical<br>products    | PRC                          | PRC                              |
| Caspian Investments<br>Resources Ltd.<br>("CIR")   | Incorporated               | Registered<br>capital<br>USD<br>10,000             | _   | 50.00   | Crude oil and natural gas extraction                                    | British<br>Virgin<br>Islands | The Republic<br>of<br>Kazakhstan |

# Summarized financial information and reconciliation to their carrying amounts in respect of the Group's principal associates:

|  | Pipeline<br>Decembe |         | Sinopec Finance<br>December 31, |           | SIBUR (i)<br>December 31, | Zhong<br>Synergetic<br>Decembe | Energy   | CIR<br>December 31, |       |      |      |
|--|---------------------|---------|---------------------------------|-----------|---------------------------|--------------------------------|----------|---------------------|-------|------|------|
|  | 2016                | 2017    | 2016                            | 2016 2017 |                           | 16 2017 2017                   |          | 2017 2016 2017      |       | 2016 | 2017 |
|  | RMB                 | RMB     | RMB                             | RMB       | RMB                       | RMB                            | RMB      | RMB                 | RMB   |      |      |
| Current assets   | 11,835              | 11,317  | 149,457                         | 161,187   | 20,719                    | 7,292                          | 8,232    | 5,120               | 5,612 |      |      |
| Non-current assets                                       | 42,124              | 40,972  | 16,478                          | 17,782    | 158,938                   | 50,301                         | 51,553   | 3,842               | 1,673 |      |      |
| Current liabilities                                      | (5,009)             | (933)   | (142,386)                       | (154,212) | (20,554)                  | (8,078)                        | (10,668) | (928)               | (908) |      |      |
| Non-current liabilities                                  | (3,350)             | (3,176) | (88)                            | (6)       | (61,771)                  | (32,137)                       | (31,494) | (883)               | (170) |      |      |
| Net assets   | 45,600              | 48,180  | 23,461                          | 24,751    | 97,332                    | 17,378                         | 17,623   | 7,151               | 6,207 |      |      |
| Net assets attributable to owners of the Company         | 45,600              | 48,180  | 23,461                          | 24,751    | 96,761                    | 17,378                         | 17,623   | 7,151               | 6,207 |      |      |
| Net assets attributable to non-<br>controlling interests |                     |         |                                 |           | 571                       |                                |          |                     |       |      |      |
| Share of net assets from                                 |                     |         |                                 |           |                           |                                |          |                     |       |      |      |
| associates   | 22,800              | 24,090  | 11,496                          | 12,128    | 9,676                     | 6,734                          | 6,829    | 3,576               | 3,104 |      |      |
| Carrying Amounts   | 22,800              | 24,090  | 11,496                          | 12,128    | 9,676                     | 6,734                          | 6,829    | 3,576               | 3,104 |      |      |
|  |                     |         |                                 |           |                           |                                |          |                     |       |      |      |

#### Summarized statement of comprehensive income

| Year ended   | Pipeline Ltd (ii) Sinope |       | opec Finance SIBUR(i) |       | Zhongtian Synergetic<br>Energy |        | CIR(iii) |      |       |         |         |       |
|--|--------------------------|-------|-----------------------|-------|--------------------------------|--------|----------|------|-------|---------|---------|-------|
| December 31  | 2016                     | 2017  | 2015                  | 2016  | 2017                           | 2017   | 2015     | 2016 | 2017  | 2015    | 2016    | 2017  |
|  | RMB                      | RMB   | RMB                   | RMB   | RMB                            | RMB    | RMB      | RMB  | RMB   | RMB     | RMB     | RMB   |
| Operating revenues   | 191                      | 5,644 | 2,533                 | 2,442 | 3,542                          | 52,496 | _        | _    | 3,569 | 687     | 2,205   | 2,563 |
| Net income/(loss) for the year                                   | 51                       | 2,543 | 3,484                 | 1,526 | 1,536                          | 9,601  | _        | _    | 123   | (90)    | (3,518) | (610) |
| Other comprehensive income/(loss)                                |                          |       | 28                    | (175) | (246)                          | (260)  |          |      |       | (4,017) | 662     | (334) |
| Total comprehensive income/(loss)                                | 51                       | 2,543 | 3,512                 | 1,351 | 1,290                          | 9,341  |          |      | 123   | (4,107) | (2,856) | (944) |
| Dividends declared by associates                                 | 23                       |       |                       |       |                                | 221    |          |      |       |         |         |       |
| Share of net income/(loss) from associates                       | 26                       | 1,272 | 1,707                 | 748   | 753                            | 960    |          |      | 48    | (45)    | (1,759) | (305) |
| Share of other comprehensive income/ (loss) from associates (iv) |                          |       | 14                    | (86)  | (121)                          | (26)   |          |      |       | (2,009) | 331     | (167) |

The share of net income for years ended December 31, 2015, 2016 and 2017 in all individually immaterial associates accounted for using equity method in aggregate were RMB 1,913, RMB 2,869 and RMB 3,182, respectively.

The share of other comprehensive (loss)/income for the years ended December 31, 2015, 2016 and 2017 in all individually immaterial associates accounted for using equity method in aggregate were a loss of RMB 632, a loss of RMB 384 and a gain of RMB 569, respectively.

The carrying amount as of December 31, 2016 and 2017 of all individually immaterial associates accounted for using equity method in aggregate were RMB 21,510 and RMB 23,899, respectively.

#### Note:

- (i) Sinopec is able to exercise significant influence in SIBUR since Sinopec has a member in SIBUR's Board of Director and has a member in SIBUR's Management Board.
- (ii) The summarized statement of comprehensive income for the year 2016 of Piepline Ltd presents the operating results from the date when the Group lost control to December 31, 2016.
- (iii) In August 2015, one of the subsidiaries of Sinopec Group Company completed the acquisition from LUKOIL OVERSEAS WEST PROJECT Ltd. a 50% equity interests in CIR and revised CIR's Articles of Association subsequently. According to the revised CIR's Articles of Association, the Group retained significant influences over CIR. As a result, the Group reclassified the investment interest in CIR from joint ventures to associates. The summarized statement of comprehensive income for the year ended December 31, 2015 of CIR represents the operating result for the period from the date when the Group reclassified the investment interest in CIR from joint ventures to associates to December 31, 2015.
- (iv) Including foreign currency translation differences.

# 20. INTEREST IN JOINT VENTURES

The Group's principal interests in joint ventures which are incorporated companies are as follows:

| Name of company   | Country of incorporation | Particulars of issued and paid up capital      | Percentage of equity held by the Company | Percentage of equity held by the Company's subsidiaries | Principal activities   | Principal place of business |
|---|--------------------------|--|--|---|--|-----------------------------|
| Fujian Refining & Petrochemical Company Limited ("FREP")                      | PRC                      | Registered<br>capital RMB<br>14,758<br>million |  | 50.00   | Manufacturing refining oil products                                  | PRC                         |
| BASF-YPC Company<br>Limited ("BASF-<br>YPC")                                  | PRC                      | Registered<br>capital RMB<br>12,547<br>million | 30.00                                    | 10.00   | Manufacturing<br>and<br>distribution of<br>petrochemical<br>products | PRC                         |
| Taihu Limited ("Taihu")   | Cyprus                   | Registered<br>capital USD<br>25,000            | _  | 49.00   | Crude oil and natural gas extraction                                 | Russia                      |
| Yanbu Aramco Sinopec<br>Refining<br>Company Ltd.<br>("YASREF")                | Saudi Arabia             | Registered<br>capital USD<br>1,560 million     | _  | 37.50   | Petroleum<br>refining and<br>processing<br>business                  | Saudi Arabia                |
| Sinopec SABIC Tianjin Petrochemical Company Limited ("Sinopec SABIC Tianjin") | PRC                      | Registered<br>capital RMB<br>9,796 million     | _  | 50.00   | Manufacturing<br>and<br>distribution of<br>petrochemical<br>products | PRC                         |

Summarized balance sheet and reconciliation to their carrying amounts in respect of the Group's principal joint ventures:

|  | FREP<br>December 31, |             | BASF-YPC<br>December 31, |             | Taihu<br>December 31, |             | YASREF<br>December 31, |             | Sinopec SABIC<br>Tianjin<br>December 31, |             |
|--|----------------------|-------------|--------------------------|-------------|-----------------------|-------------|------------------------|-------------|--|-------------|
|  | 2016<br>RMB          | 2017<br>RMB | 2016<br>RMB              | 2017<br>RMB | 2016<br>RMB           | 2017<br>RMB | 2016<br>RMB            | 2017<br>RMB | 2016<br>RMB                              | 2017<br>RMB |
| Current assets                                       | Rivid                | ICID        | Rivid                    | Rivid       | RIVID                 | KWD         | RIVID                  | KIND        | KiviD                                    | KIVID       |
| Cash and cash equivalents                            | 8,172                | 5,772       | 1,394                    | 1,800       | 1,165                 | 2,352       | 1,259                  | 4,916       | 3,634                                    | 6,524       |
| Other current assets                                 | 10,269               | 11,013      | 4,852                    | 5,335       | 1,616                 | 2,462       | 6,826                  | 10,816      | 1,886                                    | 2,709       |
| Total current assets                                 | 18,441               | 16,785      | 6,246                    | 7,135       | 2,781                 | 4,814       | 8,085                  | 15,732      | 5,520                                    | 9,233       |
| Non-current assets                                   | 21,903               | 19,740      | 13,530                   | 12,075      | 8,279                 | 7,978       | 57,054                 | 51,553      | 14,003                                   | 13,248      |
| Current liabilities                                  |                      |             |                          |             |                       |             |                        |             |  |             |
| Current financial liabilities (i)                    | (1,781)              | (1,135)     | (783)                    | (233)       | (334)                 | (20)        | (1,187)                | (5,407)     | _  | (1,236)     |
| Other current liabilities                            | (4,643)              | (5,049)     | (2,107)                  | (1,982)     | (1,616)               | (1,914)     | (6,466)                | (11,864)    | (2,657)                                  | (4,546)     |
| Total current liabilities                            | (6,424)              | (6,184)     | (2,890)                  | (2,215)     | (1,950)               | (1,934)     | (7,653)                | (17,271)    | (2,657)                                  | (5,782)     |
| Non-current liabilities                              |                      |             |                          |             |                       |             |                        |             |  |             |
| Non-current financial liabilities (ii)               | (19,985)             | (13,654)    | (1,492)                  | (955)       | (49)                  | (72)        | (43,028)               | (35,619)    | (5,337)                                  | (4,101)     |
| Other non-current liabilities                        | (252)                | (236)       | (10)                     | (19)        | (2,130)               | (2,686)     | (1,004)                | (890)       | (32)                                     | (41)        |
| Total non-current liabilities                        | (20,237)             | (13,890)    | (1,502)                  | (974)       | (2,179)               | (2,758)     | (44,032)               | (36,509)    | (5,369)                                  | (4,142)     |
| Net assets   | 13,683               | 16,451      | 15,384                   | 16,021      | 6,931                 | 8,100       | 13,454                 | 13,505      | 11,497                                   | 12,557      |
| Net assets attributable to owners of the             |                      |             |                          |             |                       |             |                        |             |  | _           |
| company  | 13,683               | 16,451      | 15,384                   | 16,021      | 6,690                 | 7,818       | 13,454                 | 13,505      | 11,497                                   | 12,557      |
| Net assets attributable to non-controlling interests | _                    | _           | _                        | _           | 241                   | 282         | _                      | _           | _  | _           |
| Share of net assets from joint ventures              | 6,842                | 8,226       | 6,154                    | 6,409       | 3,278                 | 3,831       | 5,045                  | 5,064       | 5,749                                    | 6,279       |
| Other (iii)  |                      |             |                          |             | 743                   |             |                        |             |  |             |
| Carrying Amounts                                     | 6,842                | 8,226       | 6,154                    | 6,409       | 4,021                 | 3,831       | 5,045                  | 5,064       | 5,749                                    | 6,279       |
|  |                      |             | Е 25                     | -           |                       |             |                        |             |  |             |

# Summarized statement of comprehensive income

|  |               | FREP          |               | I             | BASF-YPC      |               |               | Taihu        |               | •             | ASREF(i)      |               | Sin           | opec SABIC<br>Tianjin |               |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|---------------|---------------|---------------|---------------|---------------|-----------------------|---------------|
| Year ended<br>December 31,                                     | 2015          | 2016          | 2017          | 2015          | 2016          | 2017          | 2015          | 2016         | 2017          | 2015          | 2016          | 2017          | 2015          | 2016                  | 2017          |
| Operating revenues   | RMB<br>48,758 | RMB<br>41,764 | RMB<br>49,356 | RMB<br>15,430 | RMB<br>17,323 | RMB<br>21,020 | RMB<br>10,725 | RMB<br>9,658 | RMB<br>12,520 | RMB<br>31,823 | RMB<br>41,286 | RMB<br>61,587 | RMB<br>18,868 | RMB<br>16,337         | RMB<br>22,286 |
| Depreciation,<br>depletion and                                 | ĺ             | ,             | ,             | ĺ             |               | ĺ             | Í             |              |               |               | ĺ             |               |               |                       |               |
| amortization   | (53)          | (52)          | (16)          | (2,312)       | (2,275)       | (1,793)       | (1,279)       | (1,043)      | (715)         | (1,915)       | (2,754)       | (2,763)       | (32)          | (33)                  | (36)          |
| Interest income  | 33            | 130           | 208           | 29            | 19            | 36            | _             | 40           | 142           | 13            | 33            | 45            | 36            | 30                    | 104           |
| Interest expense   | (1,130)       | (929)         | (857)         | (239)         | (173)         | (71)          | (119)         | (113)        | (142)         | (721)         | (1,216)       | (1,382)       | (458)         | (245)                 | (223)         |
| Earning/(loss)<br>before income                                |               |               |               |               |               |               |               |              |               |               |               |               |               |                       |               |
| tax  | 3,857         | 6,476         | 6,977         | 214           | 2,606         | 4,565         | 3,455         | 2,411        | 1,697         | (259)         | 28            | 548           | 2,719         | 3,184                 | 5,113         |
| Tax expense  | (918)         | (1,574)       | (1,699)       | (56)          | (648)         | (1,151)       | (733)         | (518)        | (553)         | 13            | 56            | 57            | (522)         | (783)                 | (1,279)       |
| Net income/(loss)<br>for the year                              | 2,939         | 4,902         | 5,278         | 158           | 1,958         | 3,414         | 2,722         | 1,893        | 1,144         | (246)         | 84            | 605           | 2,197         | 2,401                 | 3,834         |
| Other<br>comprehensive<br>(loss)/income                        | _             | _             | _             | _             | _             | _             | (2,633)       | 1,851        | 25            | 738           | 647           | (554)         | _             | _                     | _             |
| Total  |               |               |               |               |               |               |               |              |               |               |               |               |               |                       |               |
| comprehensive  |               |               |               |               |               |               |               |              |               |               |               |               |               |                       |               |
| income   | 2,939         | 4,902         | 5,278         | 158           | 1,958         | 3,414         | 89            | 3,744        | 1,169         | 492           | 731           | 51            | 2,197         | 2,401                 | 3,834         |
| Dividends declared<br>by joint                                 |               |               | 1.250         | 470           | 155           | 1 100         |               |              |               |               |               |               | 225           | 300                   | 1 275         |
| ventures   |               |               | 1,250         | 470           | 155           | 1,109         |               |              |               |               |               |               | 225           | 300                   | 1,375         |
| Share of net<br>income/(loss)<br>from joint                    | 4.450         |               | 2 (20         |               | <b>500</b>    |               | 4.005         | 005          |               | (00)          |               |               | 4 000         |                       | 4.045         |
| ventures Share of other comprehensive (loss)/income from joint | 1,470         | 2,451         | 2,639         | 63            | 783           | 1,366         | 1,287         | 895          | 541           | (92)          | 31            | 227           | 1,099         | 1,201                 | 1,917         |
| ventures (iv)  | _             | _             | _             | _             | _             | _             | (1,245)       | 875          | 12            | 277           | 243           | (208)         | _             | _                     | _             |

The share of net income for the years ended December 31, 2015, 2016 and 2017 in all individually immaterial joint ventures accounted for using equity method in aggregate were RMB 960, RMB 2,061 and RMB 3,925, respectively.

The share of other comprehensive (loss)/income for the years ended December 31, 2015, 2016 and 2017 in all individually immaterial joint ventures accounted for using equity method in aggregate were a loss of RMB 1,761, a loss of RMB 934 and a gain of RMB 994, respectively.

The carrying amount as of year ended December 31, 2016 and 2017 of all individually immaterial joint ventures accounted for using equity method in aggregate were RMB 22,885 and RMB 21,552, respectively.

#### Note:

- (i) Excluding trade accounts payable and other payables.
- (ii) Excluding provisions.
- (iii) Other reflects the excess of fair value of the consideration transferred over the Group's share of the fair value of the investee's identifiable assets and liabilities as of the acquisition date.
- (iv) Including foreign currency translation differences.

#### 21. AVAILABLE-FOR-SALE FINANCIAL ASSETS

|  | December 31, |       |  |
|--|--------------|-------|--|
|  | 2016         | 2017  |  |
|  | RMB          | RMB   |  |
|  |              |       |  |
| Equity securities, listed and at quoted market price | 262          | 178   |  |
| Other investment, unlisted and at cost               | 11,175       | 1,544 |  |
|  | 11,437       | 1,722 |  |
| Less: Impairment losses for investments              | (29)         | (46)  |  |
|  | 11,408       | 1,676 |  |

Other investment, unlisted and at cost, represents the Group's interests in privately owned enterprises which are mainly engaged in oil and natural gas activities and chemical production.

The impairment losses relating to investments for the years ended December 31, 2016 and 2017 amounted to RMB nil and RMB 17, respectively.

#### 22. DEFERRED TAX ASSETS AND LIABILITIES

Deferred tax assets and deferred tax liabilities before offset are attributable to the items detailed in the table below:

|                                   | Ass<br>Decem |        | Liabilities<br>December 31, |          |  |
|-----------------------------------|--------------|--------|-----------------------------|----------|--|
|                                   | 2016         | 2017   | 2016                        | 2017     |  |
|                                   | RMB          | RMB    | RMB                         | RMB      |  |
| Receivables and inventories       | 87           | 381    |                             |          |  |
| Accruals                          | 391          | 1,925  | _                           |          |  |
| Cash flow hedges                  | 27           | 165    | (242)                       | (50)     |  |
| Property, plant and equipment     | 11,264       | 14,150 | (14,615)                    | (9,928)  |  |
| Tax losses carried forward        | 2,477        | 2,325  | <u> </u>                    |          |  |
| Available-for-sale securities     | _            | 117    | _                           |          |  |
| Intangible assets                 | 260          | 227    | <u> </u>                    | (563)    |  |
| Others                            | 133          | 180    | (229)                       | (264)    |  |
| Deferred tax assets/(liabilities) | 14,639       | 19,470 | (15,086)                    | (10,805) |  |

As of December 31, 2016 and 2017, certain subsidiaries of the Company did not recognize deferred tax of deductible loss carried forward of RMB 19,194 and RMB 20,821, respectively, of which RMB 3,833 and RMB 5,938 were incurred for the years ended December 31, 2016 and 2017, respectively, because it was not probable that the related tax benefit will be realized. Those deductible tax losses carried forward of RMB 2,508, RMB 4,462, RMB 4,080, RMB 3,833 and RMB 5,938 will expire in 2018, 2019, 2020, 2021, 2022 and after, respectively.

Periodically, management performed assessment on the probability that future taxable profit will be available over the period which the deferred tax assets can be realized or utilized. In assessing the probability, both positive and negative evidence was considered, including whether it is probable that the operations will have sufficient future taxable profits over the periods which the deferred tax assets are deductible or utilized and whether the tax losses result from identifiable causes which are unlikely to recur. During the years ended December 31, 2016 and 2017, write-down of deferred tax assets amounted to RMB 811 and RMB 26 (Note 9).

Movements in deferred tax assets and liabilities are as follows:

|  | -                                      | Balance as of<br>January 1,<br>2015            | Recognized in<br>consolidated<br>statement of<br>income<br>RMB | Recognized in other comprehensive income     | Others<br>RMB                                 | Balance as of December 31, 2015                 |
|--|--|--|--|--|---|---|
| Receivables and inventories                            |  | 2,677  | (1,128)  | 3  | _   | 1,552   |
| Accruals   |  | 258  | 155  |  | _   | 413   |
| Cash flow hedges                                       |  | 887  | _  | (637)  | _   | 250   |
| Property, plant and equipment                          |  | (8,635)  | (113)  | (383)  | _   | (9,131)   |
| Tax losses carried forward                             |  | 3,474  | 2,398  | 11   | <del>_</del>                                  | 5,883   |
| Embedded derivative component of the convertible bonds |  | 282  | _  | _  | (282)   | _   |
| Available-for-sale securities                          |  | 3  | 1  | (4)  | `—  | _   |
| Intangible assets                                      |  | 206  | (3)  | <u> </u>                                     | _   | 203   |
| Others   |  | 7  | 33   | _  | <u> </u>                                      | 40  |
| Net deferred tax (liabilities)/assets                  | =                                      | (841)  | 1,343  | (1,010)                                      | (282)   | (790)   |
|  | -                                      | Balance as of<br>January 1,<br>2016<br>RMB     | Recognized in consolidated statement of income                 | Recognized in other comprehensive income RMB | Others<br>RMB                                 | Balance as of December 31, 2016                 |
| Receivables and inventories                            |  | 1,552  | (1,505)  | 6  | 34  | 87  |
| Accruals   |  | 413  | (22)   | _  | <del></del>                                   | 391   |
| Cash flow hedges                                       |  | 250  | _  | (465)  | _   | (215)   |
| Property, plant and equipment                          |  | (9,131)  | 6,063  | (392)  | 109   | (3,351)   |
| Tax losses carried forward                             |  | 5,883  | (3,426)  | 20   | _   | 2,477   |
| Available-for-sale securities                          |  | <u> </u>                                       | (139)  | (7)  | 146   | · —   |
| Intangible assets                                      |  | 203  | (1)  | <u> </u>                                     | 58  | 260   |
| Others   |  | 40   | (136)  |  |   | (96)  |
| Net deferred tax (liabilities)/assets                  | =                                      | (790)  | 834  | (838)  | 347   | (447)   |
|  | Balance as<br>of<br>January 1,<br>2017 | Recognized in consolidated statement of income | Recognized in other comprehensive income                       | Others<br>RMB                                | Acquisition<br>of<br>Shanghai<br>SECCO<br>RMB | Balance as<br>of<br>December<br>31, 2017<br>RMB |
| Receivables and inventories                            | 87                                     | 300  | (5)  |  | _   | 381   |
| Accruals   | 391                                    | 1,534  | <u> </u>   | <u> </u>                                     | _   | 1,925   |
| Cash flow hedges                                       | (215)                                  | 9  | 313  | 8  | _   | 115   |
| Property, plant and equipment                          | (3,351)                                | 8,475  | 287  | (8)  | (1,181)                                       | 4,222   |
| Tax losses carried forward                             | 2,477                                  | (135)  | (17)   |  | ` <del>_</del>                                | 2,325   |
| Available-for-sale securities                          |  | 117  |  | _  | _   | 117   |
| Intangible assets                                      | 260                                    | (27)   | _  | _  | (569)   | (336)   |
| Others   | (96)                                   | 44   | 4  |  | (36)  | (84)  |
| Net deferred tax (liabilities)/assets                  | (447)                                  | 10,317   | 582  | (1)  | (1,786)                                       | 8,665   |
|  |  | F-40   |  |  |   |   |

## 23. LEASE PREPAYMENTS

|   | 2016   | 2017    |
|---|--------|---------|
| Contr                                     | RMB    | RMB     |
| Cost:                                     | <      |         |
| Balance as of January 1                   | 63,324 | 68,467  |
| Additions                                 | 300    | 2,614   |
| Transferred from construction in progress | 4,279  | 4,151   |
| Transferred from other long-term assets   | 994    | 3,987   |
| Reclassification to other assets          | (229)  | (2,603) |
| Disposals                                 | (422)  | (531)   |
| Exchange adjustments                      | 221    | (357)   |
| Balance as of December 31                 | 68,467 | 75,728  |
| Accumulated amortization:                 |        |         |
| Balance as of January 1                   | 12,275 | 14,226  |
| Amortization charge for the year          | 1,840  | 2,076   |
| Transferred from other long-term assets   | 132    | 2,027   |
| Reclassification to other assets          | (12)   | (770)   |
| Written back on disposals                 | (83)   | (266)   |
| Exchange adjustments                      | 74     | (91)    |
| Balance as of December 31                 | 14,226 | 17,202  |
| Net book value:                           | 54,241 | 58,526  |

## 24. LONG-TERM PREPAYMENTS AND OTHER ASSETS

|   | December 31,   |         |
|---|----------------|---------|
|   | 2016           | 2017    |
|   | RMB            | RMB     |
| Operating rights of service stations  | 26,896         | 34,268  |
| Long-term receivables from and prepayment to Sinopec Group Company and fellow | <b>2</b> 0,070 | 2 1,200 |
| subsidiaries  | 20,385         | 20,726  |
| Prepayments for construction projects to third parties                        | 2,234          | 4,999   |
| Others (i)  | 20,630         | 21,989  |
| Balance as of December 31   | 70,145         | 81,982  |

## Note:

(i) Others mainly comprise prepaid operating lease charges over one year and catalyst expenditures.

The cost of operating rights of service stations is charged to expense on a straight-line basis over the respective periods of the rights. The movement of operating rights of service stations is as follows:

|                                      | 2016<br>RMB | 2017<br>RMB |
|--------------------------------------|-------------|-------------|
| Operating rights of service stations |             |             |
| Cost:                                |             |             |
| Balance as of January 1              | 34,407      | 36,908      |
| Additions                            | 2,670       | 11,837      |
| Decreases                            | (169)       | (132)       |
| Balance as of December 31            | 36,908      | 48,613      |
| Accumulated amortization:            | <del></del> |             |
| Balance as of January 1              | 8,310       | 10,012      |
| Additions                            | 1,777       | 4,361       |
| Decreases                            | (75)        | (28)        |
| Balance as of December 31            | 10,012      | 14,345      |
| Net book value as of December 31     | 26,896      | 34,268      |
| · ·                                  |             |             |

## 25. SHORT-TERM AND LONG-TERM DEBTS AND LOANS FROM SINOPEC GROUP COMPANY AND FELLOW SUBSIDIARIES

Short-term debts represent:

|  | Decemb | December 31, |  |
|--|--------|--------------|--|
|  | 2016   | 2017         |  |
|  | RMB    | RMB          |  |
| Third parties' debts                                     | 44.044 | 24.40-       |  |
| Short-term bank loans                                    | 11,944 | 31,105       |  |
| RMB denominated  | 10,931 | 23,685       |  |
| US Dollar denominated                                    | 1,013  | 7,420        |  |
| Short-term other loans                                   |        | 299          |  |
| RMB denominated  | _      | 299          |  |
| Current portion of long-term bank loans                  | 8,795  | 1,402        |  |
| RMB denominated  | 8,753  | 1,379        |  |
| US Dollar denominated                                    | 42     | 23           |  |
| Current portion of long-term corporate bonds             | 29,500 | 22,532       |  |
| RMB denominated  | 29,500 | 16,000       |  |
| US Dollar denominated                                    |        | 6,532        |  |
|  |        | ĺ            |  |
|  | 38,295 | 23,934       |  |
| Corporate bonds (i)                                      | 6,000  |              |  |
|  | 56,239 | 55,338       |  |
| Loans from Sinopec Group Company and fellow subsidiaries |        |              |  |
| Short-term loans   | 18,430 | 23,297       |  |
| RMB denominated  | 2,858  | 1,706        |  |
| US Dollar denominated                                    | 13,577 | 19,668       |  |
| Hong Kong Dollar denominated                             | 1,969  | 1,903        |  |
| Euro denominated   | 5      | _            |  |
| Singapore Dollar denominated                             | 21     | 20           |  |
| Current portion of long-term loans                       | 150    | 2,014        |  |
| RMB denominated  | 150    | 2,014        |  |
|  | 18,580 | 25,311       |  |
|  | 74,819 | 80,649       |  |
|  |        |              |  |

The Group's weighted average interest rates on short-term loans were 2.42% and 2.72% as of December 31, 2016 and 2017, respectively. The above borrowings are unsecured.

Long-term debts represent:

|                             |   | December 31, | · 31,    |
|-----------------------------|---|--------------|----------|
|                             | Interest rate and final maturity  | 2016         | 2017     |
|                             |   | RMB          | RMB      |
| Third parties' debts        |   |              |          |
| Long-term bank loans        |   |              |          |
|                             |   |              |          |
| RMB denominated             | Interest rates ranging from 1.08% to 4.66% per annum as of December 31, 2017 with maturities through 2030       | 26,058       | 25,644   |
| US Dollar denominated       | Interest rates ranging from 1.55% to 4.29% per annum  | 426          | 102      |
|                             | as of December 31, 2017 with maturities through 2031  | 426          | 192      |
|                             |   | 26,484       | 25,836   |
| Corporate bonds(ii)         |   |              |          |
|                             |   |              |          |
| RMB denominated             | Fixed interest rates ranging from 3.30% to 5.68% per annum as of December 31, 2017 with maturities through 2022 | 65,500       | 36,000   |
| US Dollar denominated       | Fixed interest rates ranging from 1.88% to 4.25% per annum as of December 31, 2017 with maturities              |              |          |
|                             | through 2043  | 18,985       | 17,902   |
|                             |   | 84,485       | 53,902   |
| Total third parties' long-t | erm debts   | 110,969      | 79,738   |
|                             |   |              |          |
| Less: Current portion       |   | (38,295)     | (23,934) |
|                             |   | 72,674       | 55,804   |
| Long-term loans from Sin    | opec Group Company and fellow subsidiaries  |              |          |
| RMB denominated             | Interest rates ranging from interest free to 4.99% per annum as of December 31, 2017 with maturities            |              |          |
|                             | through 2022  | 44,922       | 45,334   |
| Less: Current portion       |   | (150)        | (2,014)  |
|                             |   | 44,772       | 43,320   |
|                             |   | 117,446      | 99,124   |
|                             |   |              |          |

Short-term and long-term bank loans, short-term other loans and loans from Sinopec Group Company and fellow subsidiaries are primarily unsecured and carried at amortized cost.

## Note:

- (i) The Company issued 182-day corporate bonds of face value RMB 6 billion to corporate investors in the PRC debenture market on September 12, 2016 at par value of RMB 100. The effective cost of the 182-day corporate bonds is 2.54% per annum. The short-term bonds were due on March 14, 2017 and have been fully paid by the Group at maturity.
- (ii) These corporate bonds are carried at amortized cost. As of December 31, 2017, RMB 17,902 (US Dollar denominated corporate bonds) are guaranteed by Sinopec Group Company.

## 26. TRADE ACCOUNTS AND BILLS PAYABLE

|  | December 31, |         |
|--|--------------|---------|
|  | 2016         | 2017    |
|  | RMB          | RMB     |
| Amounts due to third parties                                 | 154,882      | 177,224 |
| Amounts due to Sinopec Group Company and fellow subsidiaries | 13,168       | 13,350  |
| Amounts due to associates and joint ventures                 | 6,251        | 9,499   |
|  | 174,301      | 200,073 |
| Bills payable  | 5,828        | 6,462   |
| Trade accounts and bills payable measured at amortized cost  | 180,129      | 206,535 |

## 27. ACCRUED EXPENSES AND OTHER PAYABLES

|  | December 31, |         |
|--|--------------|---------|
|  | 2016         | 2017    |
|  | RMB          | RMB     |
| Salaries and welfare payable                     | 1,618        | 7,162   |
| Interest payable                                 | 1,396        | 7,102   |
| Payables for constructions                       | 52,827       | 60,010  |
| Other payables                                   | 21,468       | 29,022  |
| Financial liabilities carried at amortized costs | 77,309       | 96,917  |
| Taxes other than income tax                      | 46,835       | 58,925  |
| Receipts in advance                              | 95,928       | 120,734 |
| Derivative financial instruments                 | 4,472        | 2,671   |
|  | 224,544      | 279,247 |

## 28. PROVISIONS

Provisions primarily represent provision for future dismantlement costs of oil and gas properties. The Group has mainly committed to the PRC government to establish certain standardized measures for the dismantlement of its oil and gas properties by making reference to the industry practices and is thereafter constructively obligated to take dismantlement measures of its oil and gas properties.

Movement of provision of the Group's obligations for the dismantlement of its oil and gas properties is as follows:

|                           | 2015   | 2016   | 2017   |
|---------------------------|--------|--------|--------|
|                           | RMB    | RMB    | RMB    |
|                           |        |        |        |
| Balance as of January 1   | 29,613 | 33,115 | 36,918 |
| Provision for the year    | 2,899  | 3,420  | 1,627  |
| Accretion expenses        | 1,081  | 1,057  | 1,501  |
| Utilized for the year     | (599)  | (843)  | (467)  |
| Exchange adjustments      | 121    | 169    | (172)  |
| Balance as of December 31 | 33,115 | 36,918 | 39,407 |
|                           |        |        | -      |

## 29. SHARE CAPITAL

|  | December 31, |         |
|--|--------------|---------|
|  | 2016         | 2017    |
|  | RMB          | RMB     |
| Registered, issued and fully paid                                      |              |         |
| 95,557,771,046 listed A shares (2016: 95,557,771,046) of RMB 1.00 each | 95,558       | 95,558  |
| 25,513,438,600 listed H shares (2016: 25,513,438,600) of RMB 1.00 each | 25,513       | 25,513  |
|  | 121,071      | 121,071 |

The Company was established on February 25, 2000 with a registered capital of 68.8 billion domestic state-owned shares with a par value of RMB 1.00 each. Such shares were issued to Sinopec Group Company in consideration for the assets and liabilities of the Predecessor Operations transferred to the Company (Note 1).

Pursuant to the resolutions passed at an Extraordinary General Meeting held on July 25, 2000 and approvals from relevant government authorities, the Company is authorized to increase its share capital to a maximum of 88.3 billion shares with a par value of RMB 1.00 each and offer not more than 19.5 billion shares with a par value of RMB 1.00 each to investors outside the PRC. Sinopec Group Company is authorized to offer not more than 3.5 billion shares of its shareholdings in the Company to investors outside the PRC. The shares sold by Sinopec Group Company to investors outside the PRC would be converted into H shares.

In October 2000, the Company issued 15,102,439,000 H shares with a par value of RMB 1.00 each, representing 12,521,864,000 H shares and 25,805,750 American Depositary Shares ("ADSs", each representing 100 H shares), at prices of HKD 1.59 per H share and USD 20.645 per ADS, respectively, by way of a global initial public offering to Hong Kong and overseas investors. As part of the global initial public offering, 1,678,049,000 state-owned ordinary shares of RMB 1.00 each owned by Sinopec Group Company were converted into H shares and sold to Hong Kong and overseas investors.

In July 2001, the Company issued 2.8 billion listed A shares with a par value of RMB 1.00 each at RMB 4.22 by way of a public offering to natural persons and institutional investors in the PRC.

During the year ended December 31, 2010, the Company issued 88,774 listed A shares with a par value of RMB 1.00 each, as a result of exercise of 188,292 warrants entitled to the Bonds with Warrants.

During the year ended December 31, 2011, the Company issued 34,662 listed A shares with a par value of RMB 1.00 each, as a result of conversion by the holders of the 2011 Convertible Bonds.

During the year ended December 31, 2012, the Company issued 117,724,450 listed A shares with a par value of RMB 1.00 each, as a result of conversion by the holders of the 2011 Convertible Bonds.

On February 14, 2013, the Company issued 2,845,234,000 listed H shares ("the Placing") with a par value of RMB 1.00 each at the Placing Price of HKD 8.45 per share. The aggregate gross proceeds from the Placing amounted to approximately HKD 24,042,227,300.00 and the aggregate net proceeds (after deduction of the commissions and estimated expenses) amounted to approximately HKD 23,970,100,618.00.

In June 2013, the Company issued 21,011,962,225 listed A shares and 5,887,716,600 listed H shares as a result of bonus issues of 2 shares converted from the retained earnings pursuant to the shareholders' approval at the Annual General Meeting on May 29, 2013, and 1 share transferred from the share premium for every 10 existing shares.

During the year ended December 31, 2013, the Company issued 114,076 listed A shares with a par value of RMB 1.00 each, as a result of conversion by the holders of the 2011 Convertible Bonds.

During the year ended December 31, 2014, the Company issued 1,715,081,853 listed A shares with a par value of RMB 1.00 each, as a result of conversion by the holders of the 2011 Convertible Bonds.

During the year ended December 31, 2015, the Company issued 2,790,814,006 listed A shares with a par value of RMB 1.00 each, as a result of conversion by the holders of the 2011 Convertible Bonds (Note 39(g)).

All A shares and H shares rank pari passu in all material aspects.

#### Capital management

Management optimizes the structure of the Group's capital, which comprises of equity and debts. In order to maintain or adjust the capital structure of the Group, management may cause the Group to issue new shares, adjust the capital expenditure plan, sell assets to reduce debt, or adjust the proportion of short-term and long-term loans. Management monitors capital on the basis of debt-to-capital ratio, which is calculated by dividing long-term loans (excluding current portion), including long-term debts and loans from Sinopec Group Company and fellow subsidiaries, by the total equity attributable to owners of the Company and long-term loans (excluding current portion), and liability-to-asset ratio, which is calculated by dividing total liabilities by total assets. Management's strategy is to make appropriate adjustments according to the Group's operating and investment needs and the changes of market conditions, and to maintain the debt-to-capital ratio and the liability-to-asset ratio of the Group at a range considered reasonable. The debt-to-capital ratio of the Group was 14.2% and 12.0% as of December 31, 2016 and 2017, respectively. The liability-to-asset ratio of the Group was 44.5% and 46.5% as of December 31, 2016 and 2017, respectively.

The schedules of the contractual maturities of loans and commitments are disclosed in Notes 25 and 30, respectively.

There were no changes in the management's approach to capital management of the Group during the year. Neither the Company nor any of its subsidiaries is subject to externally imposed capital requirements.

## 30. COMMITMENTS AND CONTINGENT LIABILITIES

## Operating lease commitments

The Group leases land and buildings, service stations and other equipment through non-cancellable operating leases. These operating leases do not contain provisions for contingent lease rentals. None of the rental agreements contain escalation provisions that may require higher future rental payments.

As of December 31, 2016 and 2017, the future minimum lease payments under operating leases are as follows:

|                              | Decembe | December 31, |  |
|------------------------------|---------|--------------|--|
|                              | 2016    | 2017<br>RMB  |  |
|                              | RMB     |              |  |
| Within one year              | 14,917  | 11,114       |  |
| Between one and two years    | 14,228  | 11,492       |  |
| Between two and three years  | 13,966  | 10,730       |  |
| Between three and four years | 13,217  | 10,552       |  |
| Between four and five years  | 12,980  | 10,428       |  |
| Thereafter                   | 275,570 | 202,806      |  |
|                              | 344,878 | 257,122      |  |

## Capital commitments

As of December 31, 2016 and 2017, capital commitments are as follows:

|                                   | Decemb  | December 31, |  |
|-----------------------------------|---------|--------------|--|
|                                   | 2016    | 2017         |  |
|                                   | RMB     | RMB          |  |
|                                   |         |              |  |
| Authorized and contracted for (i) | 116,379 | 120,386      |  |
| Authorized but not contracted for | 31,720  | 57,997       |  |
|                                   | 148,099 | 178,383      |  |

These capital commitments relate to oil and gas exploration and development, refining and petrochemical production capacity expansion projects, the construction of service stations and oil depots and investment commitments.

Note:

(i) The investment commitments for the year ended December 31, 2016 and 2017 of the Group were RMB 4,173 and RMB 3,364, respectively.

#### Commitments to joint ventures

Pursuant to certain of the joint venture agreements entered into by the Group, the Group is obliged to purchase products from the joint ventures based on market prices.

#### Exploration and production licenses

Exploration licenses for exploration activities in the PRC are registered with the Ministry of Land and Resources. The maximum term of the Group's exploration licenses is 7 years, and may be renewed twice within 30 days prior to expiration of the original term with each renewal being for a two-year term. The Group is obligated to make progressive annual exploration investment relating to the exploration blocks in respect of which the license is issued. The Ministry of Land and Resources also issues production licenses to the Group on the basis of the reserve reports approved by relevant authorities. The maximum term of a full production license is 30 years unless a special dispensation is given by the State Council. The maximum term of production licenses issued to the Group is 80 years as a special dispensation was given to the Group by the State Council. The Group's production license is renewable upon application by the Group 30 days prior to expiration.

The Group is required to make payments of exploration license fees and production right usage fees to the Ministry of Land and Resources annually which are expensed. Payments incurred were approximately RMB 372, RMB 333 and RMB 308 for the years ended December 31, 2015, 2016 and 2017, respectively.

Estimated future annual payments are as follows:

|                              | December 31, |       |
|------------------------------|--------------|-------|
|                              | 2016         | 2017  |
|                              | RMB          | RMB   |
| Lane .                       |              |       |
| Within one year              | 263          | 205   |
| Between one and two years    | 123          | 83    |
| Between two and three years  | 25           | 32    |
| Between three and four years | 24           | 28    |
| Between four and five years  | 25           | 28    |
| Thereafter                   | 867          | 882   |
|                              | 1,327        | 1,258 |

## Contingent liabilities

As of December 31, 2016 and 2017, guarantees by the group in respect of facilities granted to the parties below are as follows:

| _               | December 31, |        |
|-----------------|--------------|--------|
|                 | 2016         | 2017   |
| _               | RMB          | RMB    |
| Joint ventures  | 658          | 940    |
| Associates (ii) | 11,545       | 13,520 |
| Others          | 10,669       | 9,732  |
|                 | 22,872       | 24,192 |

Management monitors the conditions that are subject to the guarantees to identify whether it is probable that a loss will occur, and recognizes any such losses under guarantees when those losses are estimable. As of December 31, 2016 and 2017, it was not probable that the Group will be required to make payments under the guarantees. Thus no liability has been accrued for a loss related to the Group's obligation under these guarantee arrangements.

Note:

(ii) The Group provided a guarantee in respect to standby credit facilities granted to Zhongtian Synergetic Energy by banks amount to RMB 17,050. As of December 31, 2017, the amount withdrawn by Zhongtian Synergetic Energy and guaranteed by the Group was RMB 13,520.

## Environmental contingencies

Under existing legislation, management believes that there are no probable liabilities that will have a material adverse effect on the financial position or operating results of the Group. The PRC government, however, has moved, and may move further towards more rigorous enforcement of applicable laws, and towards the adoption of more stringent environmental standards. Environmental liabilities are subject to considerable uncertainties which affect management's ability to estimate the ultimate cost of remediation efforts. These uncertainties include i) the exact nature and extent of the contamination at various sites including, but not limited to refineries, oil fields, service stations, terminals and land development areas, whether operating, closed or sold, ii) the extent of required cleanup efforts, iii) varying costs of alternative remediation strategies, iv) changes in environmental remediation requirements, and v) the identification of new remediation sites. The amount of such future cost is indeterminable due to such factors as the unknown magnitude of possible contamination and the unknown timing and extent of the corrective actions that may be required. Accordingly, the outcome of environmental liabilities under proposed or future environmental legislation cannot reasonably be estimated at present, and could be material.

The Group paid normal routine pollutant discharge fees of approximately RMB 5,813, RMB 6,358 and RMB 7,851 in the consolidated financial statements for the years ended December 31, 2015, 2016 and 2017, respectively.

## Legal contingencies

The Group is a defendant in certain lawsuits as well as the named party in other proceedings arising in the ordinary course of business. Management has assessed the likelihood of an unfavourable outcome of such contingencies, lawsuits or other proceedings and believes that any resulting liabilities will not have a material adverse effect on the financial position, operating results or cash flows of the Group.

## 31. BUSINESS COMBINATION

## (a) Acquisition of Shanghai SECCO

On October 26, 2017, a subsidiary of the Company, Gaoqiao Petrochemical Co., Ltd., purchased 50% equity interest in Shanghai SECCO from BP Chemicals East China Investment Limited with a cash consideration of RMB 10,135 ("the Transaction"). Before the Transaction, the Company and one of its subsidiaries held 30% and 20% equity interest in Shanghai SECCO, respectively. After the Transaction, the Company, together with its subsidiaries, hold 100% equity interest of Shanghai SECCO, which became a subsidiary of the Company.

Shanghai SECCO is principally engaged in the production and sale of petrochemical products including acrylonitrile, polystyrene, polyethylene, etc.

Based on the purchase price allocation performed, details of the purchase consideration, the net assets acquired and goodwill are as follows:

|   | RMB    |
|---|--------|
| Purchase consideration  |        |
| Acquisition date (October 26, 2017)   |        |
| -Cash consideration for the purchase of 50% equity interest acquired                | 10,135 |
| -Acquisition-date fair value of the 50% equity interest held before the acquisition | 10,135 |
| Total purchase consideration  | 20,270 |

The assets and liabilities recognized as a result of the acquisition are as follows:

|   |      | Fair value |
|---|------|------------|
|   |      | RMB        |
| Cash and cash equivalents   |      | 5,653      |
| Trade accounts receivable, net  |      | 538        |
| Bills receivable  |      | 641        |
| Inventories   |      | 1,702      |
| Prepaid expenses and other current assets   |      | 2,130      |
| Total current assets  |      | 10,664     |
| 10 W. 4 W. 10 |      |            |
| Property, plant and equipment, net  |      | 9,587      |
| Construction in progress  |      | 231        |
| Deferred tax assets   |      | 11         |
| Lease prepayments   |      | 1,920      |
| Long-term prepayments and other assets  |      | 1,134      |
| Total non-current assets  |      | 12,883     |
|   |      |            |
| Total assets  |      | 23,547     |
|   |      |            |
| Trade accounts payables   |      | (2,092)    |
| Accrued expenses and other payables   |      | (1,517)    |
| Income tax payable  |      | (423)      |
| Total current liabilities   |      | (4,032)    |
|   |      |            |
| Deferred tax liabilities (Note 22)  |      | (1,786)    |
| Net assets acquired   |      | 17,729     |
| Goodwill (Note 18)  |      | 2,541      |
|   | F-49 |            |
|   | Γ-47 |            |

The goodwill is attributable to the high profitability of the acquired business and synergy to be achieved post the Transaction among Shanghai SECCO and the Group's existing petrochemical operations located in eastern China.

As of Acquisition Date, the gain of RMB 3,941 was recognized as a result of remeauring the 50% equity interest held before the acquisition to its fair value, which is included in other operating (expense)/income in the Group's consolidated statement of income for the year ended December 31, 2017.

Shanghai SECCO contributed revenue of RMB 5,222 and net profit of RMB 726 to the Group for the period from the Acquisition Date to December 31, 2017.

If the acquisition had occurred on January 1, 2017, consolidated pro-forma revenue and profit for the year ended December 31, 2017 would have been RMB 2,365,632 and RMB 74,930 respectively. These amounts have been calculated using the subsidiary's results and adjusting them for the additional depreciation and amortization that would have been charged assuming the fair value adjustments to property, plant and equipment and intangible assets had applied from January 1, 2017, together with the consequential tax effects.

#### (b) Acquisition of Gaogiao Branch of SAMC

Pursuant to the resolution passed at the Directors' meeting on October 29, 2015, the Company entered into the JV Agreement with Sinopec Assets Management Corporation ("SAMC") in relation to the formation of the Gaoqiao Petrochemical Co., Ltd. According to the JV Agreement, the Company and SAMC jointly set up Gaoqiao Petrochemical Co., Ltd. for RMB 100 in cash in 2016. Subsequently, the Company subscribed capital contribution with the net assets of Gaoqiao Branch of the Company and SAMC subscribed capital contribution with the net assets of Gaoqiao Branch of SAMC. The capital contribution was completed on June 1, 2016, after which the Company held 55% of Gaoqiao Petrochemical Co., Ltd.'s voting rights and became the parent company of Gaoqiao Petrochemical Co., Ltd.

As Sinopec Group Company controls both the Group and SAMC, the non-cash transaction described above between Sinopec and SAMC has been accounted as business combination under the common control and it has been reflected in the accompanying consolidated financial statements as combination of entities under common control in a manner of predecessor value accounting. Accordingly, the assets and liabilities of Gaoqiao Branch of SAMC have been accounted for at historical cost, and the consolidated financial statements of the Group prior to these acquisitions have been restated to include the results of operation and the assets and liabilities of Gaoqiao Branch of SAMC on a combined basis.

At the completion date, the non-controlling interests amount to RMB 2,137 was recognized in relation to SAMC's 45% interest in Gaoqiao Branch of the Company.

## 32. RELATED PARTY TRANSACTIONS

Parties are considered to be related to the Group if the Group has the ability, directly or indirectly, to control or jointly control the party or exercise significant influence over the party in making financial and operating decisions, or vice versa, or where the Group and the party are subject to control or common control. Related parties may be individuals (being members of key management personnel, significant shareholders and/or their close family members) or other entities and include entities which are under the significant influence of related parties of the Group where those parties are individuals, and post-employment benefit plans which are for the benefit of employees of the Group or of any entity that is a related party of the Group.

## (a) Transactions with Sinopec Group Company and fellow subsidiaries, associates and joint ventures

The Group is part of a larger group of companies under Sinopec Group Company, which is controlled by the PRC government, and has significant transactions and relationships with Sinopec Group Company and fellow subsidiaries. Because of these relationships, it is possible that the terms of these transactions are not the same as those that would result from transactions among wholly unrelated parties.

The principal related party transactions with Sinopec Group Company and fellow subsidiaries, associates and joint ventures, which were carried out in the ordinary course of business are as follows:

|   |        | Years ended December 31, |          |         |
|---|--------|--------------------------|----------|---------|
|   | Note   | 2015                     | 2016     | 2017    |
|   |        | RMB                      | RMB      | RMB     |
| Sales of goods                                  | (i)    | 211,197                  | 194,179  | 244,211 |
| Purchases                                       | (ii)   | 92,627                   | 118,242  | 165,993 |
| Transportation and storage                      | (iii)  | 1,299                    | 1,333    | 7,716   |
| Exploration and development services            | (iv)   | 37,444                   | 27,201   | 21,210  |
| Production related services                     | (v)    | 10,880                   | 10,816   | 20,824  |
| Ancillary and social services                   | (vi)   | 6,754                    | 6,584    | 6,653   |
| Operating lease charges for land                | (vii)  | 10,618                   | 10,474   | 8,015   |
| Operating lease charges for buildings           | (vii)  | 462                      | 449      | 510     |
| Other operating lease charges                   | (vii)  | 302                      | 456      | 626     |
| Agency commission income                        | (viii) | 116                      | 129      | 127     |
| Interest income                                 | (ix)   | 207                      | 209      | 807     |
| Interest expense                                | (x)    | 1,194                    | 996      | 554     |
| Net deposits placed with related parties        | (ix)   | (14,082)                 | (21,770) | (7,441) |
| Net loans (repaid to)/ obtained from to related |        |                          |          |         |
| parties   | (xi)   | (57,881)                 | (24,877) | 5,279   |

The amounts set out in the table above in respect of each of the years in the three-year period ended December 31, 2017 represent the relevant costs and income as determined by the corresponding contracts with the related parties.

There was no guarantee given to banks by the Group in respect of banking facilities to related parties as of December 31, 2016 and 2017, except for the guarantees disclosed in Note 30.

The directors of the Company are of the opinion that the above transactions with related parties were conducted in the ordinary course of business and on normal commercial terms or in accordance with the agreements governing such transactions, and this has been confirmed by the independent non-executive directors.

## Notes:

- (i) Sales of goods represent the sale of crude oil, intermediate petrochemical products, petroleum products and ancillary materials.
- (ii) Purchases represent the purchase of materials and utility supplies directly related to the Group's operations such as the procurement of raw and ancillary materials and related services, supply of water, electricity and gas.
- (iii) Transportation and storage represent the cost for the use of railway, road and marine transportation services, pipelines, loading, unloading and storage facilities.

- (iv) Exploration and development services comprise direct costs incurred in the exploration and development such as geophysical, drilling, well testing and well measurement services.
- (v) Production related services represent ancillary services rendered in relation to the Group's operations such as equipment repair and general maintenance, insurance premium, technical research, communications, firefighting, security, product quality testing and analysis, information technology, design and engineering, construction of oilfield ground facilities, refineries and chemical plants, manufacture of replacement parts and machinery, installation, project management and environmental protection.
- (vi) Ancillary and social services represent expenditures for social welfare and support services such as educational facilities, media communication services, sanitation, accommodation, canteens, property maintenance and management services.
- (vii) Operating lease charges represent the rental paid to Sinopec Group Company for operating leases in respect of land, buildings and equipment.
- (viii) Agency commission income represents commission earned for acting as an agent in respect of sales of products and purchase of materials for certain entities owned by Sinopec Group Company.
- (ix) Interest income represents interest received from deposits placed with Sinopec Finance Company Limited and Sinopec Century Bright Capital Investment Limited, finance companies controlled by Sinopec Group Company. The applicable interest rate is determined in accordance with the prevailing saving deposit rate. The balance of deposits as of December 31, 2016 and 2017 were RMB 40,073 and RMB 47,514, respectively.
- (x) Interest expense represents interest charges on the loans and advances obtained from Sinopec Group Company and fellow subsidiaries.

(xi) The Group obtained or repaid loans from or to Sinopec Group Company and fellow subsidiaries.

In connection with the Reorganization, the Company and Sinopec Group Company entered into a number of agreements under which 1) Sinopec Group Company will provide goods and products and a range of ancillary, social and supporting services to the Group and 2) the Group will sell certain goods to Sinopec Group Company. These agreements impacted the operating results of the Group for the year ended December 31, 2017. The terms of these agreements are summarized as follows:

- The Company has entered into a non-exclusive "Agreement for Mutual Provision of Products and Ancillary Services" ("Mutual Provision Agreement") with Sinopec Group Company effective from January 1, 2000 in which Sinopec Group Company has agreed to provide the Group with certain ancillary production services, construction services, information advisory services, supply services and other services and products. While each of Sinopec Group Company and the Company is permitted to terminate the Mutual Provision Agreement upon giving at least six months notice, Sinopec Group Company has agreed not to terminate the agreement if the Group is unable to obtain comparable services from a third party. The pricing policy for these services and products provided by Sinopec Group Company to the Group is as follows:
  - (1) the government-prescribed price;
  - (2) where there is no government-prescribed price, the government-guidance price;
  - (3) where there is neither a government-prescribed price nor a government-guidance price, the market price; or
  - (4) where none of the above is applicable, the price to be agreed between the parties, which shall be based on a reasonable cost incurred in providing such services plus a profit margin not exceeding 6%.
- The Company has entered into a non-exclusive "Agreement for Provision of Cultural and Educational, Health Care and Community Services" with Sinopec Group Company effective from January 1, 2000 in which Sinopec Group Company has agreed to provide the Group with certain cultural, educational, health care and community services on the same pricing terms and termination conditions as described in the above Mutual Provision Agreement.
- The Company has entered into a series of lease agreements with Sinopec Group Company to lease certain lands and buildings effective on January 1, 2000. The lease term is 40 or 50 years for lands and 20 years for buildings, respectively. The Company and Sinopec Group Company can renegotiate the rental amount every three years for land. The Company and Sinopec Group Company can renegotiate the rental amount for buildings every year. However such amount cannot exceed the market price as determined by an independent third party.
- The Company has entered into agreements with Sinopec Group Company effective from January 1, 2000 under which the Group has been granted the right to use certain trademarks, patents, technology and computer software developed by Sinopec Group Company.
- The Company has entered into a service stations franchise agreement with Sinopec Group Company effective from January 1, 2000 under which its service stations and retail stores would exclusively sell the refined products supplied by the Group.

Amounts due from/to Sinopec Group Company and fellow subsidiaries, associates and joint ventures included in the following accounts captions are summarized as follows:

|  | Decem   | ber 31, |
|--|---------|---------|
|  | 2016    | 2017    |
|  | RMB     | RMB     |
| To 1   | 10.070  | 12.002  |
| Trade accounts receivable  | 10,978  | 12,903  |
| Other receivable   | 12,860  | 5,444   |
| Prepaid expenses and other current assets  | 570     | 189     |
| Long-term prepayments and other assets   | 20,385  | 20,726  |
| Total  | 44,793  | 39,262  |
|  |         |         |
| Trade accounts payable   | 19,419  | 22,849  |
| Accrued expenses and other payables  | 21,590  | 20,990  |
| Other long-term liabilities  | 9,998   | 10,165  |
| Short-term loans and current portion of long-term loans from Sinopec Group Company |         |         |
| and fellow subsidiaries  | 18,580  | 25,311  |
| Long-term loans excluding current portion from Sinopec Group Company and fellow    |         |         |
| subsidiaries   | 44,772  | 43,320  |
| Total  | 114,359 | 122,635 |

Amounts due from/to Sinopec Group Company and fellow subsidiaries, associates and joint ventures, other than short-term loans and long-term loans, bear no interest, are unsecured and are repayable in accordance with normal commercial terms. The terms and conditions associated with short-term loans and long-term loans payable to Sinopec Group Company and fellow subsidiaries are set out in Note 25.

The long-term borrowings mainly include an interest-free loan with a maturity period of 20 years amounting to RMB 35,560 from the Sinopec Group Company (a state-owned enterprise) through the Sinopec Finance. This borrowing is a special arrangement to reduce financing costs and improve liquidity of the Company during its initial global offering in 2000.

As of and for the years ended December 31, 2016 and 2017, no individually significant impairment losses for bad and doubtful debts were recognized in respect of amounts due from Sinopec Group Company and fellow subsidiaries, associates and joint ventures.

## (b) Key management personnel emoluments

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Group, directly or indirectly, including directors and supervisors of the Group. The key management personnel compensation is as follows:

|                                 | Year    | Years ended December 31, |         |  |  |
|---------------------------------|---------|--------------------------|---------|--|--|
|                                 | 2015    | 2016                     | 2017    |  |  |
|                                 | RMB'000 | RMB'000                  | RMB'000 |  |  |
| Short-term employee benefits    | 5,225   | 5,648                    | 5,344   |  |  |
| Retirement scheme contributions | 510     | 499                      | 424     |  |  |
|                                 | 5,735   | 6,147                    | 5,768   |  |  |
|                                 |         |                          | ,       |  |  |

## (c) Contributions to defined contribution retirement plans

The Group participates in various defined contribution retirement plans organized by municipal and provincial governments for its staff. The details of the Group's employee benefits plan are disclosed in Note 33. As of December 31, 2016 and 2017, the accrual for the contribution to post-employment benefit plans was not material.

## (d) Transactions with other state-controlled entities in the PRC

The Group is a state-controlled energy and chemical enterprise and operates in an economic regime currently dominated by entities directly or indirectly controlled by the PRC government through its government authorities, agencies, affiliations and other organizations (collectively referred as "state-controlled entities").

Apart from transactions with Sinopec Group Company and fellow subsidiaries, the Group has transactions with other state-controlled entities, include but not limited to the following:

- sales and purchases of goods and ancillary materials;
- rendering and receiving services;
- lease of assets;
- depositing and borrowing money; and
- use of public utilities.

These transactions are conducted in the ordinary course of the Group's business on terms comparable to those with other entities that are not state-controlled.

## 33. EMPLOYEE BENEFITS PLAN

As stipulated by the regulations of the PRC, the Group participates in various defined contribution retirement plans organized by municipal and provincial governments for its staff. The Group is required to make contributions to the retirement plans at rates ranging from 15.0% to 20.0% of the salaries, bonuses and certain allowances of its staff. In addition, the Group provides a supplementary retirement plan for its staff at rates not exceeding 5% of the salaries. The Group has no other material obligation for the payment of pension benefits associated with these plans beyond the annual contributions described above. The Group's contributions for the years ended December 31, 2015, 2016 and 2017 were RMB 7,878, RMB 8,385 and RMB 8,981, respectively.

## 34. SEGMENT REPORTING

Segment information is presented in respect of the Group's business segments. The format is based on the Group's management and internal reporting structure.

In a manner consistent with the way in which information is reported internally to the Group's chief operating decision maker for the purposes of resource allocation and performance assessment, the Group has identified the following five reportable segments. No operating segments have been aggregated to form the following reportable segments.

- (i) Exploration and production, which explores and develops oil fields, produces crude oil and natural gas and sells such products to the refining segment of the Group and external customers.
- (ii) Refining, which processes and purifies crude oil, that is sourced from the exploration and production segment of the Group and external suppliers, and manufactures and sells petroleum products to the chemicals and marketing and distribution segments of the Group and external customers.
- (iii) Marketing and distribution, which owns and operates oil depots and service stations in the PRC, and distributes and sells refined petroleum products (mainly gasoline and diesel) in the PRC through wholesale and retail sales networks.
- (iv) Chemicals, which manufactures and sells petrochemical products, derivative petrochemical products and other chemical products mainly to external customers.
- (v) Corporate and others, which largely comprise the trading activities of the import and export companies of the Group and research and development undertaken by other subsidiaries.

The segments were determined primarily because the Group manages its exploration and production, refining, marketing and distribution, chemicals, and corporate and others businesses separately. The reportable segments are each managed separately because they manufacture and/or distribute distinct products with different production processes and due to their distinct operating and gross margin characteristics.

#### (1) Information of reportable segmental revenues, profits or losses, assets and liabilities

The Group's chief operating decision maker evaluates the performance and allocates resources to its operating segments on an operating profit basis, without considering the effects of finance costs or investment income. Inter-segment transfer pricing is based on the market price or cost plus an appropriate margin, as specified by the Group's policy.

Assets and liabilities dedicated to a particular segment's operations are included in that segment's total assets and liabilities. Segment assets include all tangible and intangible assets, except for interest in associates and joint ventures, investments, deferred tax assets, cash and cash equivalents, time deposits with financial institutions and other unallocated assets. Segment liabilities exclude short-term, income tax payable, long-term debts, loans from Sinopec Group Company and fellow subsidiaries, deferred tax liabilities and other unallocated liabilities.

Information on the Group's reportable segments is as follows:

|   | Year        | Years ended December 31, |             |  |
|---|-------------|--------------------------|-------------|--|
|   | 2015        | 2016                     | 2017        |  |
|   | RMB         | RMB                      | RMB         |  |
| Sales of goods                              |             |                          |             |  |
| Exploration and production                  |             |                          |             |  |
| External sales                              | 57,740      | 47,443                   | 69,168      |  |
| Inter-segment sales                         | 71,019      | 58,954                   | 77,804      |  |
|   | 128,759     | 106,397                  | 146,972     |  |
| Refining                                    |             |                          |             |  |
| External sales                              | 120,650     | 102,983                  | 132,478     |  |
| Inter-segment sales                         | 800,962     | 747,317                  | 874,271     |  |
|   | 921,612     | 850,300                  | 1,006,749   |  |
| Marketing and distribution                  |             |                          |             |  |
| External sales                              | 1,086,098   | 1,027,373                | 1,191,902   |  |
| Inter-segment sales                         | 3,056       | 3,480                    | 3,962       |  |
|   | 1,089,154   | 1,030,853                | 1,195,864   |  |
| Chemicals                                   | , ,         | , ,                      | , ,         |  |
| External sales                              | 276,640     | 284,289                  | 373,814     |  |
| Inter-segment sales                         | 43,814      | 38,614                   | 49,615      |  |
|   | 320,454     | 322,903                  | 423,429     |  |
| Corporate and others                        | ,           | ,                        | ,           |  |
| External sales                              | 436,749     | 418,102                  | 533,108     |  |
| Inter-segment sales                         | 345,454     | 320,367                  | 440,303     |  |
| č   | 782,203     | 738,469                  | 973,411     |  |
| Elimination of inter-segment sales          | (1,264,305) | (1,168,732)              | (1,445,955) |  |
| Sales of goods                              | 1,977,877   | 1,880,190                | 2,300,470   |  |
|   | 1,577,077   | 1,000,170                | 2,500,170   |  |
| Other operating revenues                    |             |                          |             |  |
| Exploration and production                  | 9,894       | 9,542                    | 10,533      |  |
| Refining                                    | 5,004       | 5,486                    | 5,104       |  |
| Marketing and distribution                  | 17,512      | 22,004                   | 28,333      |  |
| Chemicals                                   | 8,417       | 12,211                   | 14,314      |  |
| Corporate and others                        | 1,671       | 1,478                    | 1,439       |  |
| Other operating revenues                    | 42,498      | 50,721                   | 59,723      |  |
| other operating revenues                    | 42,478      | 50,721                   | 39,123      |  |
| Sales of goods and other operating revenues | 2,020,375   | 1,930,911                | 2,360,193   |  |
| saics of goods and other operating revenues |             | 1,930,911                | 2,300,193   |  |
| _   | 3.55        |                          |             |  |
| ŀ   | F-57        |                          |             |  |

|   | Years ended December 31, |          |          |
|---|--------------------------|----------|----------|
|   | 2015                     | 2016     | 2017     |
|   | RMB                      | RMB      | RMB      |
| Result  |                          |          |          |
| Operating (loss)/income                                       |                          |          |          |
| By segment  |                          |          |          |
| - Exploration and production                                  | (17,418)                 | (36,641) | (45,944) |
| - Refining  | 20,959                   | 56,265   | 65,007   |
| - Marketing and distribution                                  | 28,855                   | 32,153   | 31,569   |
| - Chemicals   | 19,476                   | 20,623   | 26,977   |
| - Corporate and others  | 384                      | 3,212    | (4,484)  |
| - Elimination   | 4,566                    | 1,581    | (1,655)  |
| Total segment operating income                                | 56,822                   | 77,193   | 71,470   |
| Share of profits/(losses) from associates and joint ventures  |                          |          |          |
| - Exploration and production                                  | 633                      | (1,203)  | 1,449    |
| - Refining  | 725                      | 1,075    | 989      |
| - Marketing and distribution                                  | 1,379                    | 2,362    | 2,945    |
| - Chemicals   | 3,343                    | 5,696    | 9,621    |
| - Corporate and others  | 2,282                    | 1,376    | 1,521    |
| Aggregate share of profits from associates and joint ventures | 8,362                    | 9,306    | 16,525   |
| Investment income/(losses)                                    |                          | <u> </u> |          |
| - Exploration and production                                  | 835                      | 24       | 40       |
| - Refining  | (8)                      | (4)      | 28       |
| - Marketing and distribution                                  | 70                       | 90       | 90       |
| - Chemicals   | 41                       | 119      | 86       |
| - Corporate and others  | 350                      | 34       | 18       |
| - Elimination   | (822)                    |          |          |
| Aggregate investment income                                   | 466                      | 263      | 262      |
| Net finance costs   | (9,239)                  | (6,611)  | (1,560)  |
| Earnings before income tax                                    | 56,411                   | 80,151   | 86,697   |

|  | December 31,      |           |           |
|--|-------------------|-----------|-----------|
|  | 2015              | 2016      | 2017      |
|  | RMB               | RMB       | RMB       |
| Assets   |                   |           |           |
| Segment assets   |                   |           |           |
| - Exploration and production   | 447,307           | 402,476   | 343,404   |
| - Refining   | 264,573           | 260,903   | 273,123   |
| - Marketing and distribution   | 283,416           | 292,328   | 309,727   |
| - Chemicals  | 151,646           | 144,371   | 158,472   |
| - Corporate and others   | 108,921           | 95,263    | 170,045   |
| Total segment assets   | 1,255,863         | 1,195,341 | 1,254,771 |
|  |                   | _         |           |
| Interest in associates and joint ventures  | 84,293            | 116,812   | 131,087   |
| Available-for-sale financial assets  | 10,964            | 11,408    | 1,676     |
| Deferred tax assets  | 7,469             | 7,214     | 15,131    |
| Cash and cash equivalents and time deposits with financial institutions            | 69,666            | 142,497   | 165,004   |
| Other unallocated assets   | 19,013            | 25,337    | 27,835    |
| Total assets   | 1,447,268         | 1,498,609 | 1,595,504 |
|  |                   |           |           |
| Liabilities  |                   |           |           |
| Segment liabilities  | 07.773            | 05.044    | 00.560    |
| - Exploration and production   | 96,773            | 95,944    | 99,568    |
| - Refining   | 58,578            | 82,170    | 101,429   |
| - Marketing and distribution   | 118,897           | 133,303   | 164,101   |
| - Chemicals  | 27,243            | 32,072    | 35,293    |
| - Corporate and others   | 104,194           | 97,080    | 117,781   |
| Total segment liabilities  | 405,685           | 440,569   | 518,172   |
| Short-term debts   | 41,517            | 56,239    | 55,338    |
| Income tax payable   | 1,048             | 6,051     | 13,015    |
|  |                   |           |           |
| Long-term debts  | 95,446            | 72,674    | 55,804    |
| Loans from Sinopec Group Company and fellow subsidiaries  Deferred tax liabilities | 88,229            | 63,352    | 68,631    |
| Deletted lax habilifies  | 8,259             | 7,661     | 6,466     |
|  | 12 072            | 20,828    | 25,188    |
| Other unallocated liabilities  Total liabilities                                   | 18,923<br>659,107 | 667,374   | 742,614   |

|  | Years ended December 31, |             |         |
|--|--------------------------|-------------|---------|
|  | 2015                     | 2016        | 2017    |
|  | RMB                      | RMB         | RMB     |
| Capital expenditure                      |                          |             |         |
| Exploration and production               | 54,710                   | 32,187      | 31,344  |
| Refining                                 | 15,132                   | 14,347      | 21,075  |
| Marketing and distribution               | 22,115                   | 18,493      | 21,539  |
| Chemicals                                | 17,634                   | 8,849       | 23,028  |
| Corporate and others                     | 2,821                    | 2,580       | 2,398   |
|  | 112,412                  | 76,456      | 99,384  |
| Depreciation, depletion and amortization |                          |             |         |
| Exploration and production               | 52,155                   | 61,929      | 66,843  |
| Refining                                 | 16,557                   | 17,209      | 18,408  |
| Marketing and distribution               | 14,075                   | 14,540      | 15,463  |
| Chemicals                                | 12,088                   | 12,654      | 12,873  |
| Corporate and others                     | 1,585                    | 2,093       | 1,723   |
|  | 96,460                   | 108,425     | 115,310 |
| Impairment losses on long-lived assets   |                          |             |         |
| Exploration and production               | 4,864                    | 11,605      | 13,556  |
| Refining                                 | 9                        | 1,655       | 1,894   |
| Marketing and distribution               | 19                       | 267         | 675     |
| Chemicals                                | 142                      | 2,898       | 4,922   |
| Corporate and others                     | 112                      | <del></del> | 211     |
|  | 5,146                    | 16,425      | 21,258  |

## Geographical information

The following tables set out information about the geographical information of the Group's external sales and the Group's non-current assets, excluding financial instruments and deferred tax assets. In presenting information on the basis of geographical segments, segment revenue is based on the geographical location of customers, and segment assets are based on the geographical location of the assets.

|                    | Ye        | ears ended December 31, |           |
|--------------------|-----------|-------------------------|-----------|
|                    | 2015      | 2016                    | 2017      |
|                    | RMB       | RMB                     | RMB       |
| External sales     |           |                         |           |
| Mainland China     | 1,580,856 | 1,488,117               | 1,758,365 |
| Singapore          | 147,090   | 152,068                 | 269,349   |
| Others             | 292,429   | 290,726                 | 332,479   |
|                    | 2,020,375 | 1,930,911               | 2,360,193 |
|                    |           | December31,             |           |
|                    | 2015      | 2016                    | 2017      |
|                    | RMB       | RMB                     | RMB       |
| Non-current assets |           |                         |           |
| Mainland China     | 1,029,318 | 1,000,209               | 979,329   |
| Others             | 56,081    | 45,887                  | 48,572    |
|                    | 1,085,399 | 1,046,096               | 1,027,901 |
|                    | F 60      |                         |           |

## 35. PRINCIPAL SUBSIDIARIES

As of December 31, 2017, the following list contains the particulars of subsidiaries which principally affected the results, assets and liabilities of the Group.

|   | Particu<br>of issu | ıed    | Interests<br>held by the | Interests held<br>by non-<br>controlling |   |
|---|--------------------|--------|--------------------------|--|---|
| Name of Company   | capit              |        | Company %                | interests %                              | Principal activities  |
| Sinopec International Petroleum<br>Exploration and Production<br>Limited ("SIPL") | RMB                | 8,000  | 100.00                   | _  | Investment in exploration,<br>production and sale of petroleum<br>and natural gas                                 |
| Sinopec Great Wall Energy &<br>Chemical Company Limited                           | RMB                | 22,761 | 100.00                   | _  | Coal chemical industry investment<br>management, production and sale<br>of coal chemical products                 |
| Sinopec Yangzi Petrochemical<br>Company Limited                                   | RMB                | 13,203 | 100.00                   | _  | Manufacturing of intermediate petrochemical products and petroleum products                                       |
| Sinopec Pipeline Storage &<br>Transportation Company Limited                      | RMB                | 12,000 | 100.00                   | <u> </u>                                 | Pipeline storage and transportation of crude oil  |
| Sinopec Yizheng Chemical Fibre<br>Limited Liability Company                       | RMB                | 4,000  | 100.00                   |  | Production and sale of polyester chips and polyester fibres   |
| Sinopec Lubricant Company<br>Limited  | RMB                | 3,374  | 100.00                   |  | Production and sale of refined petroleum products, lubricant base oil, and petrochemical materials                |
| Sinopec Qingdao Petrochemical<br>Company Limited                                  | RMB                | 1,595  | 100.00                   |  | Manufacturing of intermediate petrochemical products and petroleum products                                       |
| Sinopec Chemical Sales Company<br>Limited   | RMB                | 1,000  | 100.00                   |  | Marketing and distribution of petrochemical products  |
| China International United Petroleum and Chemical Company Limited                 | RMB                | 3,000  | 100.00                   | _  | Trading of crude oil and petrochemical products   |
| Sinopec Overseas Investment<br>Holding Limited ("SOIH")                           | US Dollar          | 1,638  | 100.00                   | <u> </u>                                 | Investment holding  |
| Sinopec Catalyst Company Limited  | RMB                | 1,500  | 100.00                   |  | Production and sale of catalyst products  |
| China Petrochemical International<br>Company Limited                              | RMB                | 1,400  | 100.00                   |  | Trading of petrochemical products   |
| Sinopec Beihai Refining and<br>Chemical Limited Liability<br>Company              | RMB                | 5,294  | 98.98                    |  | Import and processing of crude oil, production, storage and sale of petroleum products and petrochemical products |
| Sinopec Qingdao Refining and<br>Chemical Company Limited                          | RMB                | 5,000  | 85.00                    | 15.00                                    | Manufacturing of intermediate petrochemical products and petroleum products                                       |
| Sinopec Zhanjiang Dongxing<br>Petrochemical Company Limited                       | RMB                | 4,397  | 75.00                    | 25.00                                    | Manufacturing of intermediate petrochemical products and petroleum products                                       |
| Sinopec Hainan Refining and<br>Chemical Company Limited                           | RMB                | 3,986  | 75.00                    | 25.00                                    | Manufacturing of intermediate petrochemical products and petroleum products                                       |
| Sinopec Marketing Company Limited ("Marketing Company")                           | RMB                | 28,403 | 70.42                    | 29.58                                    | Marketing and distribution of refined petroleum products  |
| Shanghai SECCO Petrochemical<br>Company Limited ("Shanghai<br>SECCO") (Note 31)   | RMB                | 7,801  | 67.60                    | 32.40                                    | Production and sale of petrochemical products   |
| Sinopec—SK (Wuhan) Petrochemical Company Limited ("Zhonghan Wuhan")               | RMB                | 6,270  | 65.00                    | 35.00                                    | Production, sale, research and development of ethylene and downstream byproducts                                  |
| Sinopec Kantons Holdings Limited ("Sinopec Kantons")                              | HKD                | 248    | 60.34                    | 39.66                                    | Trading of crude oil and petroleum products   |
| Gaoqiao Petrochemical Company<br>Limited (Note 31)                                | RMB                | 10,000 | 55.00                    | 45.00                                    | Manufacturing of intermediate petrochemical products and petroleum products                                       |
| Sinopec Shanghai Petrochemical<br>Company Limited ("Shanghai<br>Petrochemical")   | RMB                | 10,814 | 50.49                    |  | Manufacturing of synthetic fibres, resin and plastics, intermediate petrochemical products and petroleum products |
| Fujian Petrochemical Company<br>Limited ("Fujian Petrochemical")<br>(i)           | RMB                | 6,898  | 50.00                    | 50.00                                    | Manufacturing of plastics,<br>intermediate petrochemical<br>products and petroleum products                       |

Except for Sinopec Kantons and SOIH, which are incorporated in Bermuda and Hong Kong respectively, all of the above principal subsidiaries are incorporated and operate their businesses principally in the PRC. All of the above principal subsidiaries are limited companies.

#### Note:

(i) The Group consolidated the financial statements of the entity because it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

## Summarized financial information on subsidiaries with material non-controlling interests

Set out below are the summarized financial information which the amount before inter-company eliminations for each subsidiary that has non-controlling interests that are material to the Group.

## Summarized consolidated balance sheet

|   |             |              |          |              | Shan    | ghai         |            |                      | Shanghai |         |              |              |         |  |  |
|---|-------------|--------------|----------|--------------|---------|--------------|------------|----------------------|----------|---------|--------------|--------------|---------|--|--|
|   | Marketing C | Company      | SIP      | L            | Petroch | emical       | Fujian Pet | Fujian Petrochemical |          | Kantons | SECCO        | Zhonghai     | 1 Wuhan |  |  |
|   | Decembe     | December 31, |          | December 31, |         | December 31, |            | December 31,         |          | er 31,  | December 31, | December 31, |         |  |  |
|   | 2016        | 2017         | 2016     | 2017         | 2016    | 2017         | 2016       | 2017                 | 2016     | 2017    | 2017         | 2016         | 2017    |  |  |
|   | RMB         | RMB          | RMB      | RMB          | RMB     | RMB          | RMB        | RMB                  | RMB      | RMB     | RMB          | RMB          | RMB     |  |  |
| Current assets                            | 121,260     | 156,494      | 18,116   | 19,555       | 14,876  | 19,866       | 926        | 992                  | 1,352    | 1,196   | 11,602       | 1,489        | 1,636   |  |  |
| Current liabilities                       | (168,366)   | (212,620)    | (824)    | (7,118)      | (8,942) | (10,922)     | (812)      | (376)                | (2,891)  | (2,351) | (4,174)      | (7,521)      | (3,975) |  |  |
| Net current (liabilities)/assets          | (47,106)    | (56,126)     | 17,292   | 12,437       | 5,934   | 8,944        | 114        | 616                  | (1,539)  | (1,155) | 7,428        | (6,032)      | (2,339) |  |  |
| Non—current assets                        | 246,514     | 253,455      | 40,067   | 34,769       | 19,070  | 19,577       | 7,845      | 9,925                | 13,228   | 13,089  | 12,797       | 14,686       | 13,598  |  |  |
| Non—current liabilities                   | (1,460)     | (1,774)      | (39,322) | (28,523)     |         | (6)          | (721)      | (681)                | (3,101)  | (2,430) | (1,740)      |              |         |  |  |
| Net non—current assets                    | 245,054     | 251,681      | 745      | 6,246        | 19,070  | 19,571       | 7,124      | 9,244                | 10,127   | 10,659  | 11,057       | 14,686       | 13,598  |  |  |
| Net assets                                | 197,948     | 195,555      | 18,037   | 18,683       | 25,004  | 28,515       | 7,238      | 9,860                | 8,588    | 9,504   | 18,485       | 8,654        | 11,259  |  |  |
| Attributable to owners of the Company     | 134,393     | 132,549      | 2,784    | 3,468        | 12,500  | 14,253       | 3,619      | 4,930                | 5,162    | 5,716   | 12,496       | 5,625        | 7,318   |  |  |
| Attributable to non—controlling interests | 63,555      | 63,006       | 15,253   | 15,215       | 12,504  | 14,262       | 3,619      | 4,930                | 3,426    | 3,788   | 5,989        | 3,029        | 3,941   |  |  |

## Summarized consolidated statement of comprehensive income

|  |           |               |           |         |         |       |        |                |        |       |                 |       |       |                |       | Shanghai   |        |               |        |
|--|-----------|---------------|-----------|---------|---------|-------|--------|----------------|--------|-------|-----------------|-------|-------|----------------|-------|------------|--------|---------------|--------|
| Year ended                                       | Ma        | rketing Compa | ny        |         | SIPL    |       | Shan   | ghai Petrochem | ical   | Fuj   | ian Petrochemic | cal   | S     | inopec Kantons |       | SECCO (ii) | Z      | honghan Wuhar | a      |
| December 31,                                     | 2015      | 2016          | 2017      | 2015    | 2016    | 2017  | 2015   | 2016           | 2017   | 2015  | 2016            | 2017  | 2015  | 2016           | 2017  | 2017       | 2015   | 2016          | 2017   |
|  | RMB       | RMB           | RMB       | RMB     | RMB     | RMB   | RMB    | RMB            | RMB    | RMB   | RMB             | RMB   | RMB   | RMB            | RMB   | RMB        | RMB    | RMB           | RMB    |
| Operating revenues                               | 1,103,934 | 1,050,294     | 1,221,530 | 6,557   | 4,016   | 6,136 | 80,748 | 77,843         | 91,962 | 5,532 | 4,968           | 6,068 | 1,642 | 1,512          | 1,498 | 5,222      | 14,077 | 11,703        | 16,139 |
| Net income/ (loss) for the year                  | 23,684    | 26,461        | 27,520    | (222)   | (4,604) | 1,075 | 3,310  | 5,981          | 6,154  | 1,456 | 2,513           | 2,726 | 825   | 860            | 1,046 | 726        | 1,738  | 1,558         | 2,730  |
| Total Comprehensive income/ (loss)               | 24,391    | 27,385        | 26,986    | (4,257) | (2,481) | 396   | 3,310  | 6,000          | 6,153  | 1,456 | 2,513           | 2,726 | 302   | 879            | 1,146 | 726        | 1,738  | 1,558         | 2,730  |
| Comprehensive income/(loss) attributable to non- |           |               |           |         |         |       |        |                |        |       |                 |       |       |                |       |            |        |               |        |
| controlling interests                            | 7,755     | 9,028         | 9,033     | (1,218) | (3,279) | (38)  | 1,655  | 2,964          | 3,052  | 728   | 1,256           | 1,363 | 120   | 349            | 433   | 235        | 608    | 545           | 956    |
| Dividends paid to non-controlling interests      | 7,356     | 4,932         | 9,544     | _       | _       | _     | 10     | 563            | 1,344  | _     | _               | 625   | 40    | 51             | 70    | _          | _      | _             | _      |

## **Summarized statement of cash flows**

| Year ended   | Mar      | keting Compa | nny      |         | SIPL    |         | Shang   | hai Petrochen | nical   | Fujia | n Petrochemi | cal   | Sin   | opec Kantons | s       | Shanghai<br>SECCO (ii) | Zho     | nghan Wuha | n       |
|--|----------|--------------|----------|---------|---------|---------|---------|---------------|---------|-------|--------------|-------|-------|--------------|---------|------------------------|---------|------------|---------|
| December 31,   | 2015     | 2016         | 2017     | 2015    | 2016    | 2017    | 2015    | 2016          | 2017    | 2015  | 2016         | 2017  | 2015  | 2016         | 2017    | 2017                   | 2015    | 2016       | 2017    |
|  | RMB      | RMB          | RMB      | RMB     | RMB     | RMB     | RMB     | RMB           | RMB     | RMB   | RMB          | RMB   | RMB   | RMB          | RMB     | RMB                    | RMB     | RMB        | RMB     |
| Net cash generated from/(used in) operating activities | 33,196   | 50,840       | 51,038   | 4,059   | 2,576   | 2,758   | 4,933   | 7,182         | 7,061   | (179) | 617          | (558) | 1,185 | 505          | 968     | 1,639                  | 4,223   | 3,636      | 2,976   |
| Net cash generated from/(used in) investing activities | 21,180   | (31,573)     | (35,738) | (4,052) | 2,729   | (2,211) | (439)   | (190)         | (2,401) | 76    | 54           | 225   | (504) | 261          | 193     | 5,567                  | (4,869) | (3,080)    | (2,415) |
| Net cash (used in)/generated from financing activities | (42,777) | (20,424)     | (16,499) | 637     | (4,414) | 243     | (3,696) | (2,637)       | (2,590) | (176) | (55)         | (158) | (443) | (1,338)      | (1,093) | _                      | 588     | (682)      | (631)   |
| Net increase /(decrease) in cash and cash equivalents  | 11,599   | (1,157)      | (1,199)  | 644     | 891     | 790     | 798     | 4,355         | 2,070   | (279) | 616          | (491) | 238   | (572)        | 68      | 7,206                  | (58)    | (126)      | (70)    |
| Cash and cash equivalents as of January 1              | 2,682    | 14,914       | 14,373   | 1,327   | 2,042   | 3,045   | 279     | 1,077         | 5,441   | 380   | 101          | 717   | 630   | 886          | 289     |                        | 337     | 260        | 134     |
| Effect of foreign currency exchange rate changes       | 633      | 616          | (253)    | 71      | 112     | (230)   |         | 9             | (7)     |       |              |       | 18    | (25)         | (14)    | (1)                    | (19)    |            |         |
| Cash and cash equivalents as of<br>December 31         | 14,914   | 14,373       | 12,921   | 2,042   | 3,045   | 3,605   | 1,077   | 5,441         | 7,504   | 101   | 717          | 226   | 886   | 289          | 343     | 7,205                  | 260     | 134        | 64      |

<sup>(</sup>ii) The summarized consolidated statement of comprehensive income and the summarized statement of cash flow of Shanghai SECCO present the results from the acquisition date to December 31, 2017.

## 36. FINANCIAL RISK MANAGEMENT AND FAIR VALUES

#### **Overview**

Financial assets of the Group include cash and cash equivalents, time deposits with financial institutions, investments, financial assets at fair value through profit or loss, trade accounts receivable, bills receivable, amounts due from Sinopec Group Company and fellow subsidiaries, amounts due from associates and joint ventures, available-for-sale financial assets, derivative financial instruments and other receivables. Financial liabilities of the Group include short-term and long-term debts, loans from Sinopec Group Company and fellow subsidiaries, trade accounts payable, bills payable, amounts due to Sinopec Group Company and fellow subsidiaries, derivative financial instruments and other payables.

The Group has exposure to the following risks from its uses of financial instruments:

- credit risk;
- liquidity risk;
- market risk.

The Board of Directors has overall responsibility for the establishment, oversight of the Group's risk management framework, and developing and monitoring the Group's risk management policies.

The Group's risk management policies are established to identify and analyze the risks faced by the Group, and set appropriate risk limits and controls to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Group's activities. The Group, through its training and management controls and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations. Internal audit department undertakes both regular and ad hoc reviews of risk management controls and procedures, the results of which are reported to the Group's audit committee.

#### Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Group's deposits placed with financial institutions (including structured deposit) and receivables from customers. To limit exposure to credit risk relating to deposits, the Group primarily places cash deposits only with large financial institutions in the PRC with acceptable credit ratings. The majority of the Group's trade accounts receivable relate to sales of petroleum and chemical products to related parties and third parties operating in the petroleum and chemical industries. No single customer accounted for greater than 10% of total accounts receivable as of December 31, 2017, except the amounts due from Sinopec Group Company and fellow subsidiaries. Management performs ongoing credit evaluations of the Group's customers' financial condition and generally does not require collateral on trade accounts receivable. The Group maintains an impairment loss for doubtful accounts and actual losses have been within management's expectations.

The carrying amounts of cash and cash equivalents, time deposits with financial institutions, trade accounts and bills receivables, derivative financial instruments, financial assets at fair value through profit or loss and other receivables, represent the Group's maximum exposure to credit risk in relation to financial assets.

## Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group's approach in managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed capital conditions, without incurring unacceptable losses or risking damage to the Group's reputation. Management prepares monthly cash flow budget to ensure that the Group will always have sufficient liquidity to meet its financial obligations as they fall due. The Group arranges and negotiates financing with financial institutions and maintains a certain level of standby credit facilities to reduce the Group's liquidity risk.

As of December 31, 2016 and 2017, the Group has standby credit facilities with several PRC financial institutions which provide borrowings up to RMB 256,375 and RMB 361,852 on an unsecured basis, at a weighted average interest rate of 3.57% and 3.40 % per annum, respectively. As of December 31, 2016 and 2017, the Group's outstanding borrowings under these facilities were RMB 36,933 and RMB 56,567 and were included in debts, respectively.

The following table sets out the remaining contractual maturities at the balance sheet date of the Group's financial liabilities, which are based on contractual undiscounted cash flows (including interest payments computed using contractual rates or, if floating, based on prevailing rates current at the balance sheet date) and the earliest date the Group would be required to repay:

|                                 |                     |  | December                                | 31, 2016                                   |   |                             |
|---------------------------------|---------------------|--|---|--|---|-----------------------------|
|                                 | Carrying amount RMB | Total contractual undiscounted cash flow RMB             | Within 1<br>year or on<br>demand<br>RMB | More than 1 year but less than 2 years RMB | More than 2 years but less than 5 years RMB | More than<br>5 years<br>RMB |
| Short-term debts                | 56,239              | 57,515   | 57,515                                  | _  | _   | _                           |
| Long-term debts                 | 72,674              | 85,021   | 2,672                                   | 27,277                                     | 30,535                                      | 24,537                      |
| Loans from Sinopec Group        |                     |  |   |  |   |                             |
| Company and fellow subsidiaries | 63,352              | 63,678   | 18,790                                  | 2,092                                      | 42,796                                      | _                           |
| Trade accounts payable          | 174,301             | 174,301  | 174,301                                 | · —  | <u> </u>                                    | _                           |
| Bills payable                   | 5,828               | 5,828  | 5,828                                   |  | _   | _                           |
| Accrued expenses and other      |                     |  |   |  |   |                             |
| payables                        | 81,781              | 81,781   | 81,781                                  |  |   |                             |
|                                 | 454,175             | 468,124  | 340,887                                 | 29,369                                     | 73,331                                      | 24,537                      |
|                                 |                     |  | December                                | 31, 2017                                   |   |                             |
|                                 | Carrying amount RMB | Total<br>contractual<br>undiscounted<br>cash flow<br>RMB | Within 1<br>year or on<br>demand<br>RMB | More than 1 year but less than 2 years RMB | More than 2 years but less than 5 years RMB | More than 5 years RMB       |

Management believes that the Group's current cash on hand, expected cash flows from operations and available standby credit facilities from financial institutions will be sufficient to meet the Group's short-term and long-term capital requirements.

56,562

66,202

68,950

6,462

99,588

200,073

56,562

2,166

25,504

6,462

99,588

200,073

14,477

4,439

32,316

39,007

17,243

55,338

55,804

68,631

6,462

99,588

200,073

## Market risk

Short-term debts

Long-term debts

Bills payable

payables

Loans from Sinopec Group

Accrued expenses and other

Trade accounts payable

Company and fellow subsidiaries

Market risk is the risk that changes in market prices, such as foreign exchange rates and interest rates. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimizing the return on risk.

#### Currency risk

Currency risk arises on financial instruments that are denominated in a currency other than the functional currency in which they are measured. The Group's currency risk exposure primarily relates to short-term and long-term debts and loans from Sinopec Group Company and fellow subsidiaries denominated in US Dollars. The Group enters into foreign exchange contracts to manage its currency risk exposure.

Included in short-term and long-term debts and loans from Sinopec Group Company and fellow subsidiaries of the Group are the following amounts denominated in a currency other than the functional currency of the entity to which they relate:

|  | Decen | nber 31, |
|--|-------|----------|
|  | 2016  | 2017     |
| Gross exposure arising from loans and borrowings |       |          |
| US Dollars                                       | 126   | 204      |

A 5 percent strengthening/weakening of RMB against the following currencies as of December 31, 2016 and 2017 would have increased/decreased net income of the Group by the amounts shown below. This analysis has been determined assuming that the change in foreign exchange rates had occurred at the balance sheet date and had been applied to the foreign currency balances to which the Group has significant exposure as stated above, and that all other variables, in particular interest rates, remain constant. The analysis is performed on the same basis for 2016.

| Decen | nber 31, |
|-------|----------|
| 2016  | 2017     |
| 33    | 50       |

Other than the amounts as disclosed above, the amounts of other financial assets and liabilities of the Group are substantially denominated in the functional currency of respective entity within the Group.

#### Interest rate risk

The Group's interest rate risk exposure arises primarily from its short-term and long-term debts. Debts bearing interest at variable rates and at fixed rates expose the Group to cash flow interest rate risk and fair value interest rate risk respectively. The interest rates of short-term and long-term debts, and loans from Sinopec Group Company and fellow subsidiaries of the Group are disclosed in Note 25.

As of December 31, 2016, it is estimated that a general increase/decrease of 100 basis points in variable interest rates, with all other variables held constant, would decrease/increase the Group's net income by approximately RMB 327. As of December 31, 2017, it is estimated that a general increase/decrease of 100 basis points in variable interest rates, with all other variables held constant, would decrease/increase the Group's net income by approximately RMB 450. This sensitivity analysis has been determined assuming that the change of interest rates was applied to the Group's debts outstanding at the balance sheet date with exposure to cash flow interest rate risk. The analysis is performed on the same basis for 2016.

## Commodity price risk

The Group engages in oil and gas operations and is exposed to commodity price risk related to price volatility of crude oil, refined oil products and chemical products. The fluctuations in prices of crude oil, refined oil products and chemical products could have significant impact on the Group. The Group uses derivative financial instruments, including commodity futures and swaps, to manage a portion of this risk. As of December, 31, 2016 and 2017, the Group had certain commodity contracts of crude oil, refined oil product and chemical products designated as qualified cash flow hedges and economic hedges. The fair values of these derivative financial instruments as of December 31, 2016 and 2017 are set out in Notes 15 and 27.

As of December 31, 2016, it is estimated that a general increase/decrease of USD 10 per barrel in basic price of derivative financial instruments, with all other variables held constant, would impact the fair value of derivative financial instruments, which would decrease/increase the Group's net income by approximately RMB 634 and decrease/increase the Group's other reserves by approximately RMB 4,007. As of December 31, 2017, it is estimated that a general increase/decrease of USD 10 per barrel in basic price of derivative financial instruments, with all other variables held constant, would impact the fair value of derivative financial instruments, which would decrease/increase the Group's net income for the period by approximately RMB 4,049 and decrease/increase the Group's other reserves by approximately RMB 701. This sensitivity analysis has been determined assuming that the change in prices had occurred at the balance sheet date and the change was applied to the Group's derivative financial instruments at that date with exposure to commodity price risk. The analysis is performed on the same basis for 2016.

## Fair values

## (i) Financial instruments carried at fair value

The following table presents the carrying value of financial instruments measured at fair value at the balance sheet date across the three levels of the fair value hierarchy defined in IFRS 7, *Financial Instruments: Disclosures*, with the fair value of each financial instrument categorized in its entirety based on the lowest level of input that is significant to that fair value measurement. The levels are defined as follows:

- Level 1 (highest level): fair values measured using quoted prices (unadjusted) in active markets for identical financial instruments.
- Level 2: fair values measured using quoted prices in active markets for similar financial instruments, or using valuation techniques in which all significant inputs are directly or indirectly based on observable market data.
- Level 3 (lowest level): fair values measured using valuation techniques in which any significant input is not based on observable market data.

|   |         | December  | 31, 2016 |        |  |  |  |
|---|---------|---|----------|--------|--|--|--|
|   | Level 1 | Level 2   | Level 3  | Total  |  |  |  |
|   | RMB     | RMB   | RMB      | RMB    |  |  |  |
| Assets  |         |   |          |        |  |  |  |
| Available-for-sale financial assets:                    |         |   |          |        |  |  |  |
| - Listed  | 262     | _   | _        | 262    |  |  |  |
| Derivative financial instruments:                       |         |   |          |        |  |  |  |
| - Derivative financial assets                           | 29      | 733   |          | 762    |  |  |  |
|   | 291     | 733   |          | 1,024  |  |  |  |
|   |         |   | ·        |        |  |  |  |
| Liabilities   |         |   |          |        |  |  |  |
| Derivative financial instruments:                       |         |   |          |        |  |  |  |
| - Derivative financial liabilities                      | 2,586   | 1,886   | _        | 4,472  |  |  |  |
|   | 2,586   | 1,886   | _        | 4,472  |  |  |  |
|   |         |   |          |        |  |  |  |
|   |         | 1,886 — December 31, 2017 Level 2 Level 3 Total |          |        |  |  |  |
|   | Level 1 |   |          | Total  |  |  |  |
|   | RMB     | RMB   | RMB      | RMB    |  |  |  |
| Assets  |         |   |          |        |  |  |  |
| Financial assets at fair value through profit and loss: |         |   |          |        |  |  |  |
| - Structured deposit                                    | _       | _   | 51,196   | 51,196 |  |  |  |
| Available-for-sale financial assets:                    |         |   |          |        |  |  |  |
| - Listed  | 178     | _   | _        | 178    |  |  |  |
| Derivative financial instruments:                       |         |   |          |        |  |  |  |
| - Derivative financial assets                           | 343     | 183   | <u>_</u> | 526    |  |  |  |
|   | 521     | 183   | 51,196   | 51,900 |  |  |  |
|   |         |   |          |        |  |  |  |
| Liabilities   |         |   |          |        |  |  |  |
| Derivative financial instruments:                       |         |   |          |        |  |  |  |
| - Derivative financial liabilities                      | 1,277   | 1,388   |          | 2,665  |  |  |  |
|   | 1,277   | 1,388   |          | 2,665  |  |  |  |
| Derivative financial instruments:                       |         |   |          |        |  |  |  |

During the years ended December 31, 2016 and 2017, there was no transfers among instruments in Level 1, Level 2 and Level 3.

Management of the Group evaluates the fair value of Level 3 financial assets using discounted cash flow model based on the interest rate and commodity index which were influenced by historical fluctuation and the probability of market fluctuation as input value for evaluating the fair value of the structural deposits.

## (ii) Fair values of financial instruments carried at other than fair value

The disclosures of the fair value estimates, and their methods and assumptions of the Group's financial instruments, are made to comply with the requirements of IFRS 7 and IAS 39 and should be read in conjunction with the Group's consolidated financial statements and related notes. The estimated fair value amounts have been determined by the Group using market information and valuation methodologies considered appropriate. However, considerable judgment is required to interpret market data to develop the estimates of fair value. Accordingly, the estimates presented herein are not necessarily indicative of the amounts the Group could realize in a current market exchange. The use of different market assumptions and/or estimation methodologies may have a material effect on the estimated fair value amounts.

The fair values of the Group's financial instruments carried at other than fair value (other than long-term indebtedness and investments in unquoted equity securities) approximate their carrying amounts due to the short-term maturity of these instruments. The fair values of long-term indebtedness are estimated by discounting future cash flows using current market interest rates offered to the Group that range between 1.06% to 4.90% and 1.79% to 4.90% for the years ended December 31, 2016 and 2017, respectively. The following table presents the carrying amount and fair value of the Group's long-term indebtedness other than loans from Sinopec Group Company and fellow subsidiaries as of December 31, 2016 and 2017:

| Decemb  | oer 31, |
|---------|---------|
| 2016    | 2017    |
| RMB     | RMB     |
| 110,969 | 79,738  |
| 109,308 | 78,040  |

The Group has not developed an internal valuation model necessary to estimate the fair value of loans from Sinopec Group Company and fellow subsidiaries as it is not considered practicable to estimate their fair values because the cost of obtaining discount and borrowing rates for comparable borrowings would be excessive based on the Reorganization, the Group's existing capital structure and the terms of the borrowings.

Investments in unquoted equity securities are individually and in aggregate not material to the Group's financial condition or results of operations. There are no listed market prices for such interests in the PRC and, accordingly, a reasonable estimate of fair value could not be made without incurring excessive costs. The Group intends to hold these unquoted other investments in equity securities for long term purpose.

Except for the above items, the financial assets and liabilities of the Group are carried at amounts not materially different from their fair values as of December 31, 2016 and 2017.

## 37. ACCOUNTING ESTIMATES AND JUDGMENTS

The Group's financial condition and results of operations are sensitive to accounting methods, assumptions and estimates that underlie the preparation of the consolidated financial statements. Management bases the assumptions and estimates on historical experience and on various other assumptions that it believes to be reasonable and which form the basis for making judgments about matters that are not readily apparent from other sources. On an ongoing basis, management evaluates its estimates. Actual results may differ from those estimates as facts, circumstances and conditions change.

The selection of critical accounting policies, the judgments and other uncertainties affecting application of such policies and the sensitivity of reported results to changes in conditions and assumptions are factors to be considered when reviewing the consolidated financial statements. The significant accounting policies are set forth in Note 2. Management believes the following critical accounting policies involve the most significant judgments and estimates used in the preparation of the consolidated financial statements.

#### Oil and gas properties and reserves

The accounting for the exploration and production's oil and gas activities is subject to accounting rules that are unique to the oil and gas industry. There are two methods to account for oil and gas business activities, the successful efforts method and the full cost method. The Group has elected to use the successful efforts method. The successful efforts method reflects the volatility that is inherent in exploring for mineral resources in that costs of unsuccessful exploratory efforts are charged to expense as they are incurred. These costs primarily include dry hole costs, seismic costs and other exploratory costs. Under the full cost method, these costs are capitalized and written-off or depreciated over time.

Engineering estimates of the Group's oil and gas reserves are inherently imprecise and represent only approximate amounts because of the subjective judgments involved in developing such information. There are authoritative guidelines regarding the engineering criteria that have to be met before estimated oil and gas reserves can be designated as "proved". Proved and proved developed reserves estimates are updated at least annually and take into account recent production and technical information about each field. In addition, as prices and cost levels change from year to year, the estimate of proved and proved developed reserves also changes. This change is considered a change in estimate for accounting purposes and is reflected on a prospective basis in relation to depreciation rates. Oil and gas reserves have a direct impact on the assessment of the recoverability of the carrying amounts of oil and gas properties reported in the financial statements. If proved reserves estimates are revised downwards, earnings could be affected by changes in depreciation expense or an immediate write-down of the property's carrying amount.

Future dismantlement costs for oil and gas properties are estimated with reference to engineering estimates after taking into consideration the anticipated method of dismantlement required in accordance with industry practices in similar geographic area, including estimation of economic life of oil and gas properties, technology and price level. The present values of these estimated future dismantlement costs are capitalized as oil and gas properties with equivalent amounts recognized as provision for dismantlement costs.

Despite the inherent imprecision in these engineering estimates, these estimates are used in determining depreciation expense, impairment loss and future dismantlement costs. Capitalized costs of proved oil and gas properties are amortized on a unit-of-production method based on volumes produced and reserves.

## Impairment for long-lived assets

If circumstances indicate that the net book value of a long-lived asset may not be recoverable, the asset may be considered "impaired", and an impairment loss may be recognized in accordance with IAS 36 "Impairment of Assets". The carrying amounts of long-lived assets are reviewed periodically in order to assess whether the recoverable amounts have declined below the carrying amounts. These assets are tested for impairment whenever events or changes in circumstances indicate that their recorded carrying amounts may not be recoverable. When such a decline has occurred, the carrying amount is reduced to recoverable amount. For goodwill, the recoverable amount is estimated annually. The recoverable amount is the greater of the net selling price and the value in use. It is difficult to precisely estimate selling price because quoted market prices for the Group's assets or cash-generating units are not readily available. In determining the value in use, expected cash flows generated by the asset or the cash-generating unit are discounted to their present value, which requires significant judgment relating to level of sale volume, selling price, amount of operating costs and discount rate. Management uses all readily available information in determining an amount that is a reasonable approximation of recoverable amount, including estimates based on reasonable and supportable assumptions and projections of sale volume, selling price, amount of operating costs and discount rate.

## Depreciation

Property, plant and equipment, other than oil and gas properties, are depreciated on a straight-line basis over the estimated useful lives of the assets, after taking into account the estimated residual value. Management reviews the estimated useful lives of the assets at least annually in order to determine the amount of depreciation expense to be recorded during any reporting period. The useful lives are based on the Group's historical experience with similar assets and take into account anticipated technological changes. The depreciation expense for future periods is adjusted if there are significant changes from previous estimates.

## Impairment for bad and doubtful debts

Management estimates impairment losses for bad and doubtful debts resulting from the inability of the Group's customers to make the required payments. Management bases the estimates on the aging of the accounts receivable balance, customer creditworthiness, and historical write-off experience. If the financial condition of the customers were to deteriorate, actual write-offs would be higher than estimated.

## Allowance for diminution in value of inventories

If the costs of inventories become higher than their net realizable values, an allowance for diminution in value of inventories is recognized. Net realizable value represents the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to make the sale. Management bases the estimates on all available information, including the current market prices of the finished goods and raw materials, and historical operating costs. If the actual selling prices were to be lower or the costs of completion were to be higher than estimated, the actual allowance for diminution in value of inventories could be higher than estimated.

## 38. PARENT AND ULTIMATE HOLDING COMPANY

The directors consider the parent and ultimate holding company of the Group as of December 31, 2017 is Sinopec Group Company, a state-owned enterprise established in the PRC. This entity does not produce financial statements available for public use.

## 39. RESERVES

|   | 2016<br>RMB        | 2017<br>RMB        |
|---|--------------------|--------------------|
| Capital reserve (Note (a))  | 10.12              | 10.12              |
| Balance as of January 1   | 28,341             | 26,290             |
| Distribution to SAMC in the Acquisition of Gaoqiao Branch of SAMC (Note 31)               | (2,137)            |                    |
| Transaction with non-controlling interests  | (30)               | (13)               |
| Others  | 116                | 49                 |
| Balance as of December 31   | 26,290             | 26,326             |
| Share premium (Note (b))  |                    |                    |
| Balance as of January 1   | 55,850             | 55,850             |
| Balance as of December 31   | 55,850             | 55,850             |
|   |                    |                    |
| Statutory surplus reserve (Note (c))  | <b>5</b> 0.640     | <b>5</b> 0 (40     |
| Balance as of January 1   | 79,640             | 79,640             |
| Appropriation   | <del>_</del>       | 3,042              |
| Balance as of December 31   | 79,640             | 82,682             |
| Discretionary surplus reserve   |                    |                    |
| Balance as of January 1   | 117,000            | 117,000            |
| Balance as of December 31   | 117,000            | 117,000            |
| Other reserves  |                    |                    |
| Balance as of January 1   | (6,781)            | 424                |
| Other comprehensive income  | 7,052              | (3,481)            |
| Others Others   | 153                | 123                |
| Balance as of December 31   | 424                | (2,934)            |
| Detained construct (Nets (JN)   |                    |                    |
| Retained earnings (Note (d)) Balance as of January 1                                      | 281,076            | 210.710            |
|   |                    | 310,719            |
| Net income attributable to owners of the Company  | 46,672             | 51,244             |
| Final dividend inspect of the previous year, approved and paid during the year (Note (e)) | (7,264)            | (20,582)           |
| Interim dividend (Note (f))   | (9,565)            | (12,107)           |
| Appropriation  Pro-Six distribution to SAMC (Note 21)                                     | (47)               | (3,042)            |
| Profit distribution to SAMC (Note 31) Others  | (47)               | (107)              |
| Balance as of December 31   | (153)              | (107)              |
| Balance as of December 31   | 310,719<br>589,923 | 326,125<br>605,049 |
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Note:

- (a) The capital reserve represents (i) the difference between the total amount of the par value of shares issued and the amount of the net assets transferred from Sinopec Group Company in connection with the Reorganization, and (ii) the difference between the considerations paid over or received the amount of the net assets of entities and related operations acquired from or sold to Sinopec Group Company and non-controlling interests.
- (b) The application of the share premium account is governed by Sections 167 and 168 of the PRC Company Law.
- (c) According to the PRC Company Law and the Company's Articles of Association, the Company is required to transfer 10% of its net income determined in accordance with the accounting policies complying with Accounting Standards for Business Enterprises ("ASBE"), adopted by the Group to statutory surplus reserve. In the event that the reserve balance reaches 50% of the registered capital, no transfer is needed. The transfer to this reserve must be made before distribution of a dividend to shareholders. Statutory surplus reserve can be used to make good previous years' losses, if any, and may be converted into share capital by issuing new shares to shareholders in proportion to their existing shareholdings or by increasing the par value of the shares currently held by them, provided that the balance after such issue is not less than 25% of the registered capital.
  - During the years ended December 31, 2015, 2016 and 2017, the Company transferred RMB 3,088, RMB nil and RMB 3,042, respectively, being 10% of the net income determined in accordance with the accounting policies complying with ASBE, to this reserve.
- (d) As of December 31, 2016 and 2017, the amount of retained earnings available for distribution was RMB 182,440 and RMB 177,049, respectively, being the amount determined in accordance with ASBE. According to the Company's Articles of Association, the amount of retained earnings available for distribution to owners of the Company is the lower of the amount determined in accordance with the accounting policies complying with ASBE and the amount determined in accordance with the accounting policies complying with IFRS.
  - Pursuant to a resolution passed at the director's meeting on March 23, 2018, final dividends in respect of the year ended December 31, 2017 of RMB 0.40 per share totaling RMB 48,428 were proposed for shareholders' approval at the Annual General Meeting. Final cash dividend for the year ended December 31, 2017 proposed after the balance sheet date has not been recognized as a liability at the balance sheet date.
- (e) Pursuant to the shareholders' approval at the Annual General Meeting on May 18, 2016, a final dividend of RMB 0.06 per share totaling RMB 7,264 according to total shares as of June 23, 2016 was approved. All dividends have been paid in the year ended December 31, 2016.
  - Pursuant to the shareholders' approval at the Annual General Meeting on June 28, 2017, a final dividend of RMB 0.17 per share totaling RMB 20,582 according to total shares as of July 18, 2017 was approved. All dividends have been paid in the year ended December 31, 2017.
- (f) Pursuant to the Company's Articles of Association and a resolution passed at the Directors' meeting on August 26, 2016, the directors authorized to declare the interim dividend for the year ended December 31, 2016 of RMB 0.079 per share totaling RMB 9,565. Dividends were paid on September 21, 2016.
  - Pursuant to the Company's Articles of Association and a resolution passed at the Directors' meeting on August 25, 2017, the directors authorized to declare the interim dividend for the year ended December 31, 2017 of RMB 0.10 per share totaling RMB 12,107. Dividends were paid on September 20, 2017.

(g) On March 1, 2011, the Company issued convertible bonds due in 2017 with an aggregate principal amount of RMB 23,000 in the PRC (the "2011 Convertible Bonds"). The 2011 Convertible Bonds were issued at par value of RMB 100 and bear a fixed interest rate of 0.5% per annum for the first year, 0.7% for the second year, 1.0% for the third year, 1.3% for the fourth year, 1.8% for the fifth year and 2.0% for the sixth year, payable annually. The holders can convert the 2011 Convertible Bonds into A shares of the Company from August 24, 2011 onwards at an initial conversion price of RMB 9.73 per share, subject to adjustment for, amongst other things, cash dividends, subdivision or consolidation of shares, bonus issues, issue of new shares, rights issues, capital distribution, change of control and other events which have an effect on the issued share capital of the Company ("the Conversion Option"). Unless previously redeemed, converted or purchased and cancelled, the 2011 Convertible Bonds will be redeemed within 5 trading days after maturity at 107% of the principal amount, including interest for the sixth year. The initial carrying amounts of the liability component and the derivative component, representing the Conversion Option of the 2011 Convertible Bonds, were RMB 19,279 and RMB 3,610, respectively.

During the term of the 2011 Convertible Bonds, the conversion price may be subject to downward adjustment that if the closing prices of the Company's A Shares in any fifteen trading days out of any thirty consecutive trading days are lower than 80% of the prevailing conversion price, the board of directors may propose downward adjustment to the conversion price subject to the shareholders' approval. The adjusted conversion price shall be not less than (a) the average trading price of the Company's A Shares for the twenty trading days prior to the shareholders' approval, (b) the average trading price of the Company's A Shares on the day immediately before the shareholders' approval, (c) the net asset value per share based on the latest audited financial statements prepared under ASBE, and (d) the nominal value per share.

During the term of the 2011 Convertible Bonds, if the closing price of the A Shares of the Company is not lower than 130% of the conversion price in at least fifteen trading days out of any thirty consecutive trading days, the Company has the right to redeem all or part of the 2011 Convertible Bonds based on the nominal value plus the accrued interest ("the terms of conditional redemption").

As of January 26, 2015, the terms of conditional redemption of 2011 Convertible Bonds of the Company have been triggered for the first time. At the 22nd meeting of the fifth session of the board of the Company (the "Board"), the Board has reviewed and approved the proposal for the redemption of 2011 Convertible Bonds, and decided to exercise the right of redemption and to redeem all of the outstanding 2011 Convertible Bonds registered on February 11, 2015.

From January 1, 2015 to February 11, 2015, the 2011 Convertible Bonds with a total nominal value of RMB 13,647 were converted into 2,790,814,006 A shares of the Company with a conversion price of 4.89 per share. As of February 11, 2015, the total share capital of the Company has been increased to 121,071,209,646 shares. The unconverted convertible bonds amounted to RMB 52.78 (527,760 convertible bonds). As at February 17, 2015, the Company has redeemed and fully paid the unconverted portion at RMB 101.261 per convertible bond (including the accrued interest and interest tax accrued thereon).

As of December 31, 2015, the 2011 Convertible bonds have been fully converted or redeemed.

## SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING ACTIVITIES (UNAUDITED)

(All currency amounts in million)

In accordance with the Accounting Standards Update 2010-03, "Extractive Activities - Oil and Gas (Topic 932): Oil and Gas Reserve Estimation and Disclosures" ("ASU 2010-03"), issued by the Financial Accounting Standards Board of the United States, and in accordance with "Industrial Information Disclosure Guidelines for Public Company - No.8 Oil and Gas Exploitation", issued by Shanghai Stock Exchange, this section provides supplemental information on oil and gas exploration and producing activities of the Group and its equity method investments at 31 December 2017 and 2016, and for the years then ended in the following six separate tables. Tables I through III provide historical cost information under IFRS pertaining to capitalized costs related to oil and gas producing activities; costs incurred in oil and gas exploration and development; and results of operation related to oil and gas producing activities. Tables IV through VI present information on the Group's and its equity method investments' estimated net proved reserve quantities; standardized measure of discounted future net cash flows; and changes in the standardized measure of discounted cash flows.

Tables I to VI of supplemental information on oil and gas producing activities set out below represent information of the Company and its consolidated subsidiaries and equity method investments.

Table I: Capitalized costs related to oil and gas producing activities

|   |           |           |                           | Years er  | ided Decemb | er 31,                    |           |           |                           |
|---|-----------|-----------|---------------------------|-----------|-------------|---------------------------|-----------|-----------|---------------------------|
| •   |           | 2015      |                           |           | 2016        |                           |           | 2017      |                           |
|   | Total     | China     | RMB<br>Other<br>countries | Total     | China       | RMB<br>Other<br>countries | Total     | China     | RMB<br>Other<br>countries |
| The Group   |           |           |                           |           |             |                           |           |           |                           |
| Property cost, wells and related equipments and facilities                    | 613,134   | 572,446   | 40,688                    | 650,686   | 606,493     | 44,193                    | 667,657   | 625,621   | 42,036                    |
| Supporting equipments and facilities  | 204,793   | 204,773   | 20                        | 192,877   | 192,855     | 22                        | 210,711   | 210,694   | 17                        |
| Uncompleted wells, equipments and facilities                                  | 70,731    | 69,873    | 858                       | 52,935    | 52,931      | 4                         | 41,397    | 41,389    | 8                         |
| Total capitalized costs   | 888,658   | 847,092   | 41,566                    | 896,498   | 852,279     | 44,219                    | 919,765   | 877,704   | 42,061                    |
| Accumulated depreciation,<br>depletion, amortization and<br>impairment losses | (465,393) | (438,097) | (27,296)                  | (528,636) | (495,538)   | (33,098)                  | (601,318) | (565,651) | (35,667)                  |
| Net capitalized costs   | 423,265   | 408,995   | 14,270                    | 367,862   | 356,741     | 11,121                    | 318,447   | 312,053   | <b>6,394</b>              |
| Equity method investments   | 425,203   | 400,223   | 14,270                    | 307,002   | 550,741     | 11,121                    | 310,447   | 312,035   | 0,574                     |
| Share of net capitalized costs of associates and joint ventures               | 11,296    |           | 11,296                    | 9,337     |             | 9,337                     | 6,357     |           | 6,357                     |
| Total of the Group's and its equity method investments' net capitalized costs | 434,561   | 408,995   | 25,566                    | 377,199   | 356,741     | 20,458                    | 324,804   | 312,053   | 12,751                    |
|   |           |           |                           | S-1       |             |                           |           |           |                           |

# SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING ACTIVITIES (UNAUDITED) (All currency amounts in million)

Table II: Costs incurred in oil and gas exploration and development

|   |             |        |                           | Years e | nded Decemb | er 31,                    |        |        |                           |
|---|-------------|--------|---------------------------|---------|-------------|---------------------------|--------|--------|---------------------------|
|   |             | 2015   |                           |         | 2016        |                           |        | 2017   |                           |
|   | Total       | China  | RMB<br>Other<br>countries | Total   | China       | RMB<br>Other<br>countries | Total  | China  | RMB<br>Other<br>countries |
| The Group   |             |        |                           |         |             |                           |        |        |                           |
| Exploration   | 11,572      | 11,572 | _                         | 10,942  | 10,942      | _                         | 11,589 | 11,589 | _                         |
| Development   | 52,229      | 49,605 | 2,624                     | 32,280  | 31,918      | 362                       | 30,844 | 30,710 | 134                       |
| Total costs incurred  | 63,801      | 61,177 | 2,624                     | 43,222  | 42,860      | 362                       | 42,433 | 42,299 | 134                       |
| Equity method investments   | <del></del> |        | -                         |         |             |                           |        |        |                           |
| Share of costs of exploration<br>and development of<br>associates and joint ventures      | 1,218       | _      | 1,218                     | 719     | _           | 719                       | 724    | _      | 724                       |
| Total of the Group's and its equity method investments' exploration and development costs | 65,019      | 61,177 | 3,842                     | 43,941  | 42,860      | 1,081                     | 43,157 | 42,299 | 858                       |
|   |             |        |                           | S-2     |             |                           |        |        |                           |

# SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING ACTIVITIES (UNAUDITED)

(All currency amounts in million)

Table III: Results of operations related to oil and gas producing activities

|  | Years ended December 31, |          |                           |                  |          |                           |          |          |                           |
|--|--------------------------|----------|---------------------------|------------------|----------|---------------------------|----------|----------|---------------------------|
| -  |                          | 2015     |                           |                  | 2016     | ,                         | 2017     |          |                           |
| ·  | Total                    | China    | RMB<br>Other<br>countries | Total            | China    | RMB<br>Other<br>countries | Total    | China    | RMB<br>Other<br>countries |
| -  | Total                    | Ciliia   | countries                 | 10tai            | Cillia   | countries                 | 10tai    | Сппа     | countries                 |
| The Group  |                          |          |                           |                  |          |                           |          |          |                           |
| Revenues   |                          |          |                           |                  |          |                           |          |          |                           |
| Sales  | 52,580                   | 52,580   | _                         | 36,720           | 36,720   | _                         | 43,644   | 43,644   | _                         |
| Transfers  | 70,453                   | 63,900   | 6,553                     | 58,571           | 54,555   | 4,016                     | 73,447   | 67,311   | 6,136                     |
|  | 123,033                  | 116,480  | 6,553                     | 95,291           | 91,275   | 4,016                     | 117,091  | 110,955  | 6,136                     |
| Production costs excluding taxes                     | (48,315)                 | (46,883) | (1,432)                   | (44,077)         | (42,652) | (1,425)                   | (46,311) | (44,977) | (1,334)                   |
| Exploration expenses                                 | (10,459)                 | (10,459) | ` _ `                     | (11,035)         | (11,035) | ` _                       | (11,089) | (11,089) | ` _ `                     |
| Depreciation, depletion,                             | , , ,                    | ( ) /    |                           | , , ,            | , , ,    |                           | , , ,    | ( ) /    |                           |
| amortization and impairment                          |                          |          |                           |                  |          |                           |          |          |                           |
| losses   | (56,293)                 | (52,216) | (4,077)                   | (73,534)         | (68,594) | (4,940)                   | (80,399) | (74,856) | (5,543)                   |
| Taxes other than income tax                          | (6,083)                  | (6,083)  | _                         | (4,576)          | (4,576)  | _                         | (8,726)  | (8,726)  | _                         |
| Earnings before taxation                             | 1,883                    | 839      | 1,044                     | (37,931)         | (35,582) | (2,349)                   | (29,434) | (28,693) | (741)                     |
| Income tax expense                                   | (1,205)                  | (210)    | (995)                     | (798)            | _        | (798)                     | 1,188    | _        | 1,188                     |
| Results of operation from                            |                          |          |                           |                  |          |                           |          |          |                           |
| producing activities                                 | 678                      | 629      | 49                        | (38,729)         | (35,582) | (3,147)                   | (28,246) | (28,693) | 447                       |
| Equity method investments                            |                          |          |                           |                  |          |                           |          |          |                           |
| Revenues   |                          |          |                           |                  |          |                           |          |          |                           |
| Sales  | 7,207                    |          | 7,207                     | 6,352            |          | 6,352                     | 8,080    |          | 8,080                     |
|  | 7,207                    | _        | 7,207                     | 6,352            | _        | 6,352                     | 8,080    | _        | 8,080                     |
| Production costs excluding taxes                     | (1,165)                  | _        | (1,165)                   | (2,205)          | _        | (2,205)                   | (2,748)  | _        | (2,748)                   |
| Exploration expenses                                 | (4)                      | _        | (4)                       | _                | _        | _                         | _        | _        |                           |
| Depreciation, depletion, amortization and impairment |                          |          |                           |                  |          |                           |          |          |                           |
| losses   | (2,157)                  | _        | (2,157)                   | (2,752)          | _        | (2,752)                   | (1,243)  | _        | (1,243)                   |
| Taxes other than income tax                          | (3,036)                  | _        | (3,036)                   | (2,570)          |          | (2,570)                   | (3,628)  | _        | (3,628)                   |
| Earnings before taxation                             | 845                      | _        | 845                       | (1,175)          | _        | (1,175)                   | 461      | _        | 461                       |
| Income tax expense                                   | (418)                    | _        | (418)                     | (195)            | _        | (195)                     | (347)    | _        | (347)                     |
| Share of net income for                              |                          |          |                           |                  |          |                           |          |          |                           |
| producing activities of                              |                          |          |                           | (4.2 <b>-</b> 0) |          | (4.250)                   |          |          |                           |
| associates and joint ventures                        | 427                      |          | 427                       | (1,370)          |          | (1,370)                   | 114      |          | 114                       |
| Total of the Group's and its                         |                          |          |                           |                  |          |                           |          |          |                           |
| equity method investments'                           |                          |          |                           |                  |          |                           |          |          |                           |
| results of operations for                            | 1,105                    | 629      | 476                       | (40,099)         | (35,582) | (4,517)                   | (28,132) | (28,693) | 561                       |
| producing activities                                 | 1,105                    | 029      | 4/0                       | (40,099)         | (33,362) | (4,517)                   | (20,132) | (20,093) | 501                       |

The results of operations for producing activities for the years ended 31 December 2017 and 2016 are shown above. Revenues include sales to unaffiliated parties and transfers (essentially at third—party sales prices) to other segments of the Group. Income taxes are based on statutory tax rates, reflecting allowable deductions and tax credits. General corporate overhead and interest income and expense are excluded from the results of operations.

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# SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING ACTIVITIES (UNAUDITED) (All currency amounts in million)

#### **Table IV: Reserve quantities information**

The Group's and its equity method investments' estimated net proved underground oil and gas reserves and changes thereto for the years ended 31 December 2017 and 2016 are shown in the following table.

Proved oil and gas reserves are those quantities of oil and gas, which by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible from a given date forward, from known reservoirs, and under existing economic conditions, operating methods, and government regulation before contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether the estimate is a deterministic estimate or probabilistic estimate. Due to the inherent uncertainties and the limited nature of reservoir data, estimates of underground reserves are subject to change as additional information becomes available.

Proved developed oil and gas reserves are proved reserves that can be expected to be recovered through existing wells with existing equipment and operating methods or in which the cost of the required equipment is relatively minor compared with the cost of a new well.

"Net" reserves exclude royalties and interests owned by others and reflect contractual arrangements and obligation of rental fee in effect at the time of the estimate.

# SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING ACTIVITIES (UNAUDITED)

(All currency amounts in million)

|  | Years ended December 31, |       |                           |       |               |                           |       |          |                           |  |
|--|--------------------------|-------|---------------------------|-------|---------------|---------------------------|-------|----------|---------------------------|--|
|  | 2015                     |       |                           |       | 2016          |                           |       | 2017     |                           |  |
|  | Total                    | China | RMB<br>Other<br>countries | Total | China         | RMB<br>Other<br>countries | Total | China    | RMB<br>Other<br>countries |  |
| ne Group   |                          |       |                           |       |               |                           |       |          |                           |  |
| Proved developed and<br>undeveloped reserves (oil)<br>(million barrels)            |                          |       |                           |       |               |                           |       |          |                           |  |
| Beginning of year  | 2,772                    | 2,700 | 72                        | 1,957 | 1,902         | 55                        | 1,256 | 1,216    | 2                         |  |
| Revisions of previous estimates  | (638)                    | (641) | 3                         | (505) | (509)         | 4                         | 151   | 148      |                           |  |
| Improved recovery  | 99                       | 99    | _                         | 35    | 35            | _                         | 90    | 86       |                           |  |
| Extensions and discoveries   | 41                       | 41    | _                         | 41    | 41            | _                         | 60    | 60       |                           |  |
| Production   | (317)                    | (297) | (20)                      | (272) | (253)         | (19)                      | (264) | (249)    | (                         |  |
| End of year  | 1,957                    | 1,902 | 55                        | 1,256 | 1,216         | 40                        | 1,293 | 1,261    |                           |  |
| Non—controlling interest in<br>proved developed and<br>undeveloped reserves at the |                          |       |                           |       | <del></del> · |                           |       |          |                           |  |
| end of year  | 25                       | _     | 25                        | 18    | _             | 18                        | 14    | _        |                           |  |
| Proved developed reserves  |                          |       |                           |       |               |                           |       |          |                           |  |
| Beginning of year  | 2,529                    | 2,465 | 64                        | 1,753 | 1,701         | 52                        | 1,120 | 1,080    |                           |  |
| End of year  | 1,753                    | 1,701 | 52                        | 1,120 | 1,080         | 40                        | 1,156 | 1,124    |                           |  |
| Proved undeveloped reserves  |                          |       |                           |       |               |                           |       | <u> </u> |                           |  |
| Beginning of year  | 243                      | 235   | 8                         | 204   | 201           | 3                         | 136   | 136      |                           |  |
| End of year  | 204                      | 201   | 3                         | 136   | 136           | _                         | 137   | 137      |                           |  |
| Proved developed and<br>undeveloped reserves (gas)<br>(billion cubic feet)         |                          |       |                           |       |               |                           |       |          |                           |  |
| Beginning of year  | 6,715                    | 6,715 | _                         | 7,551 | 7,551         | _                         | 7,160 | 7,160    |                           |  |
| Revisions of previous estimates  | (252)                    | (252) | _                         | (170) | (170)         | _                         | (107) | (107)    |                           |  |
| Improved recovery  | 70                       | 70    | _                         | 66    | 66            | _                         | 72    | 72       |                           |  |
| Extensions and discoveries   | 1,749_                   | 1,749 |                           | 475_  | 475           |                           | 769   | 769      |                           |  |
| Production   | (731)                    | (731) |                           | (762) | (762)         |                           | (909) | (909)    |                           |  |
| End of year  | 7,551                    | 7,551 |                           | 7,160 | 7,160         |                           | 6,985 | 6,985    |                           |  |
| Proved developed reserves  |                          |       |                           |       |               |                           |       |          |                           |  |
| Beginning of year  | 5,987                    | 5,987 |                           | 6,439 | 6,439         |                           | 6,436 | 6,436    |                           |  |
| End of year  | 6,439                    | 6,439 |                           | 6,436 | 6,436         |                           | 6,000 | 6,000    |                           |  |
| Proved undeveloped reserves  |                          |       |                           |       |               |                           |       |          |                           |  |
| Beginning of year  | 728                      | 728   | _                         | 1,112 | 1,112         | _                         | 724   | 724      |                           |  |
| End of year  | 1,112                    | 1,112 | _                         | 724   | 724           | _                         | 985   | 985      |                           |  |

# SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING ACTIVITIES (UNAUDITED) (All currency amounts in million)

| -  | Years ended December 31, |        |                 |       |       |           | 2017       | 17    |           |
|--|--------------------------|--------|-----------------|-------|-------|-----------|------------|-------|-----------|
| -  | 2015                     |        |                 |       | 2016  | Other     |            | 2017  | Other     |
| -  | Total                    | China  | Other countries | Total | China | countries | Total      | China | countries |
| quity method investments   |                          |        |                 |       |       |           |            |       |           |
| Proved developed and undeveloped reserves of associates and joint ventures (oil) (million barrels)             |                          |        |                 |       |       |           |            |       |           |
| Beginning of year  | 275                      | _      | 275             | 286   | _     | 286       | 296        | _     | 29        |
| Revisions of previous estimates  | 34                       | _      | 34              | (2)   | _     | (2)       | 12         | _     | 1         |
| Improved recovery  | 1                        | _      | 1               | 3     | _     | 3         | 8          | _     | •         |
| Extensions and discoveries   | 9                        | _      | 9               | 41    | _     | 41        | 20         | _     | 2         |
| Production Production  | (33)                     |        | (33)            | (32)  |       | (32)      | (30)       |       | (3        |
| End of year  | 286                      | _      | 286             | 296   | _     | 296       | 306        | _     | 30        |
| Proved developed reserves  |                          |        |                 |       |       |           |            |       |           |
| Beginning of year  | 252                      |        | 252             | 260   |       | 260       | 273        |       | 27        |
| End of year  | 232<br>260               |        | 252<br>260      | 273   |       | 273       | 273<br>273 |       | 27        |
|  | 200                      |        | 200             | 213   |       | 273       | 213        |       |           |
| Proved undeveloped reserves  | 22                       |        | 22              | 26    |       | 26        | 22         |       | 2         |
| Beginning of year  | 23                       |        | 23              | 26    |       |           | 23         |       |           |
| End of year  | 26                       |        | 26              | 23    |       | 23        | 33         |       |           |
| Proved developed and<br>undeveloped reserves of<br>associates and joint ventures<br>(gas) (billion cubic feet) |                          |        |                 | 10    |       |           | 10         |       |           |
| Beginning of year  | 26                       | _      | 26              | 19    |       | 19        | 18         |       |           |
| Revisions of previous estimates  | (3)                      | _      | (3)             | 3     | _     | 3         | (2)        | _     |           |
| Improved recovery  |                          |        | _               |       |       |           |            |       | -         |
| Extensions and discoveries   | _                        | _      |                 | _     | _     | _         | _          | _     | -         |
| Production   | (4)                      |        | (4)             | (4)   |       | (4)       | (4)        |       |           |
| End of year  | 19                       |        | 19              | 18    |       | 18        | 12         |       |           |
| Proved developed reserves  |                          | _      |                 |       |       |           |            |       |           |
| Beginning of year  | 24                       | _      | 24              | 18    | _     | 18        | 18         | _     | 1         |
| End of year  | 18                       | _      | 18              | 18    | _     | 18        | 12         | _     | 1         |
| Proved undeveloped reserves  |                          |        |                 | _     |       |           |            |       |           |
| Beginning of year  | 2                        | _      | 2               | 1     | _     | 1         | _          | _     |           |
| End of year  | 1                        |        | 1               |       |       |           |            |       | -         |
| otal of the Group and its equity   |                          |        |                 |       |       |           |            |       |           |
| method investments   |                          |        |                 |       |       |           |            |       |           |
| Proved developed and<br>undeveloped reserves (oil)<br>(million barrels)  |                          |        |                 |       |       |           |            |       |           |
| Beginning of year  | 3,047                    | 2,700  | 347             | 2,243 | 1,902 | 341       | 1,552      | 1,216 | 3:        |
| End of year  | 2,243                    | 1,902  | 341             | 1,552 | 1,216 | 336       | 1,599      | 1,261 | 3.        |
| Proved developed and<br>undeveloped reserves (gas)<br>(billion cubic feet)                                     |                          | -,, ,- |                 |       |       |           |            |       |           |
| Beginning of year  | 6,741                    | 6,715  | 26              | 7,570 | 7,551 | 19        | 7,178      | 7,160 |           |
| End of year  | 7,570                    | 7,551  | 19              | 7,178 | 7,160 | 18        | 6,997      | 6,985 |           |
|  |                          |        |                 |       |       |           |            |       |           |

# SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING ACTIVITIES (UNAUDITED)

(All currency amounts in million)

#### Table V: Standardized measure of discounted future net cash flows

The standardized measure of discounted future net cash flows, related to the above proved oil and gas reserves, is calculated in accordance with the requirements of ASU 2010-03 and "Industrial Information Disclosure Guidelines for Public Company - No.8 Oil and Gas Exploitation". Estimated future cash inflows from production are computed by applying the average, first-day-of-the-month price for oil and gas during the twelve-month period before the ending date of the period covered by the report to year-end quantities of estimated net proved reserves. Future price changes are limited to those provided by contractual arrangements in existence at the end of each reporting year. Future development and production costs are those estimated future expenditures necessary to develop and produce year-end estimated proved reserves based on year-end cost indices, assuming continuation of year-end economic conditions. Estimated future income taxes are calculated by applying appropriate year-end statutory tax rates to estimated future pre—tax net cash flows, less the tax basis of related assets. Discounted future net cash flows are calculated using 10% discount factors. This discounting requires a year-by-year estimate of when the future expenditure will be incurred and when the reserves will be produced.

The information provided does not represent management's estimate of the Group's and its equity method investments' expected future cash flows or value of proved oil and gas reserves. Estimates of proved reserve quantities are imprecise and change over time as new information becomes available. Moreover, probable and possible reserves, which may become proved in the future, are excluded from the calculations. The arbitrary valuation requires assumptions as to the timing and amount of future development and production costs. The calculations are made for the years ended 31 December 2017 and 2016 and should not be relied upon as an indication of the Group's and its equity method investments' future cash flows or value of its oil and gas reserves.

|   | Years ended December 31, |           |              |              |           |              |           |               |              |
|---|--------------------------|-----------|--------------|--------------|-----------|--------------|-----------|---------------|--------------|
|   |                          | 2015      |              |              | 2016      |              |           |               |              |
|   |                          |           | RMB<br>Other |              |           | RMB<br>Other |           |               | RMB<br>Other |
|   | <u>Total</u>             | China     | countries    | Total        | China     | countries    | Total     | China         | countries    |
| The Group   |                          |           |              |              |           |              |           |               |              |
| Future cash flows                                       | 931,637                  | 912,898   | 18,739       | 603,785      | 592,389   | 11,396       | 639,336   | 628,187       | 11,149       |
| Future production costs                                 | (440,079)                | (430,695) | (9,384)      | (271,650)    | (266,549) | (5,101)      | (292,789) | (287,914)     | (4,875)      |
| Future development costs                                | (38,669)                 | (34,092)  | (4,577)      | (20,241)     | (15,615)  | (4,626)      | (24,999)  | (20,314)      | (4,685)      |
| Future income tax expenses                              | (11,139)                 | (9,779)   | (1,360)      | (1,405)      | (10,010)  | (1,405)      | (1,374)   | (20,511)      | (1,374)      |
| Undiscounted future net cash                            |                          | (- ,)     | ( 9 )        | (, 11)       | -         | ( ,)         | <u> </u>  |               | ( ) )        |
| flows   | 441,750                  | 438,332   | 3,418        | 310,489      | 310,225   | 264          | 320,174   | 319,959       | 215          |
| 10% annual discount for                                 | ,,,                      | ,         | -,           | 2 - 2, 1 - 2 | 0.10,==0  |              | ,         | 2 - 2 , 2 - 2 |              |
| estimated timing of cash                                |                          |           |              |              |           |              |           |               |              |
| flows   | (152,031)                | (150,855) | (1,176)      | (102,342)    | (102,332) | (10)         | (97,082)  | (97,115)      | 33           |
| Standardized measure of                                 |                          |           |              |              |           |              | · ·       | •             |              |
| discounted future net cash                              |                          |           |              |              |           |              |           |               |              |
| flows   | 289,719                  | 287,477   | 2,242        | 208,147      | 207,893   | 254          | 223,092   | 222,844       | 248          |
| Discounted future net cash                              |                          |           |              |              |           |              |           |               |              |
| flows attributable to non-                              |                          |           |              |              |           |              |           |               |              |
| controlling interests                                   | 1,356                    |           | 1,356        | 114          |           | 114          | 112       |               | 112          |
| Equity method investments                               |                          |           |              |              |           |              |           |               |              |
| Future cash flows                                       | 41,013                   | _         | 41,013       | 35,690       | _         | 35,690       | 43,587    | _             | 43,587       |
| Future production costs                                 | (11,665)                 | _         | (11,665)     | (10,783)     | _         | (10,783)     | (12,131)  | _             | (12,131)     |
| Future development costs                                | (2,996)                  | _         | (2,996)      | (3,444)      | _         | (3,444)      | (4,692)   | _             | (4,692)      |
| Future income tax expenses                              | (4,159)                  |           | (4,159)      | (3,303)      |           | (3,303)      | (4,406)   |               | (4,406)      |
| Undiscounted future net cash                            |                          |           |              |              |           |              |           |               |              |
| flows   | 22,193                   | _         | 22,193       | 18,160       | _         | 18,160       | 22,358    | _             | 22,358       |
| 10% annual discount for                                 |                          |           |              |              |           |              |           |               |              |
| estimated timing of cash                                | (0.020)                  |           | (0.020)      | (7.0(0)      |           | (7.060)      | (0.002)   |               | (0.002)      |
| flows   | (9,828)                  |           | (9,828)      | (7,969)      |           | (7,969)      | (9,803)   | _             | (9,803)      |
| Standardized measure of discounted future net cash      |                          |           |              |              |           |              |           |               |              |
| flows   | 12.265                   |           | 12 265       | 10 101       |           | 10.101       | 10 555    |               | 12 555       |
|   | 12,365                   |           | 12,365       | 10,191       |           | 10,191       | 12,555    |               | 12,555       |
| Total of the Group's and its equity method investments' |                          |           |              |              |           |              |           |               |              |
| results of standardized                                 |                          |           |              |              |           |              |           |               |              |
| measure of discounted future                            |                          |           |              |              |           |              |           |               |              |
| net cash flows  | 302,084                  | 287,477   | 14,607       | 218,338      | 207,893   | 10,445       | 235,647   | 222,844       | 12,803       |
| net cash hows   |                          |           | ,,,,,,       |              |           |              | /-        | ,             | ,- ,-        |
|   |                          |           |              | C 7          |           |              |           |               |              |
|   |                          |           | i            | S-7          |           |              |           |               |              |

# SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING ACTIVITIES (UNAUDITED)

(All currency amounts in million)

Table VI: Changes in the standardized measure of discounted cash flows

|  | Years ended December 31, |          |          |  |
|--|--------------------------|----------|----------|--|
|  | 2015                     | 2016     | 2017     |  |
|  | RMB                      | RMB      | RMB      |  |
| The Group  |                          |          |          |  |
| Sales and transfers of oil and gas produced, net of production costs   | (68,635)                 | (46,637) | (62,054) |  |
| Net changes in prices and production costs                             | (281,975)                | (53,715) | 7,487    |  |
| Net changes in estimated future development cost                       | (6,873)                  | 6,073    | (7,320   |  |
| Net changes due to extensions, discoveries and improved recoveries     | 44,838                   | 15,113   | 29,799   |  |
| Revisions of previous quantity estimates                               | (68,875)                 | (48,479) | 20,608   |  |
| Previously estimated development costs incurred during the year        | 18,494                   | 9,370    | 5,747    |  |
| Accretion of discount  | 60,005                   | 30,340   | 20,909   |  |
| Net changes in income taxes  | 79,281                   | 6,363    | (231     |  |
| Net changes for the year   | (223,740)                | (81,572) | 14,945   |  |
| Equity method investments  |                          |          |          |  |
| Sales and transfers of oil and gas produced, net of production costs   | (3,006)                  | (1,577)  | (1,704   |  |
| Net changes in prices and production costs                             | (12,987)                 | (3,952)  | 2,479    |  |
| Net changes in estimated future development cost                       | 997                      | (534)    | (856     |  |
| Net changes due to extensions, discoveries and improved recoveries     | 611                      | 1,887    | 1,205    |  |
| Revisions of previous quantity estimates                               | 1,520                    | (92)     | 688      |  |
| Previously estimated development costs incurred during the year        | 1,163                    | 322      | 206      |  |
| Accretion of discount  | 2,681                    | 1,308    | 967      |  |
| Net changes in income taxes  | 1,736                    | 464      | (621     |  |
| Net changes for the year   | (7,285)                  | (2,174)  | 2,364    |  |
| Total of the Group's and its equity method investments' results of net |                          |          |          |  |
| changes for the year   | (231,025)                | (83,746) | 17,309   |  |

# **Articles of Association**

 $\mathbf{of}$ 

# **China Petroleum & Chemical Corporation**

Revised at the Annual General Meeting for the Year 2016 on 28 June 2017

#### CHAPTER 1 GENERAL PROVISIONS

- Article 1 These Articles of Association are drawn up in accordance with the "Company Law of the People's Republic of China" (the "Company Law"), the "Securities Law of the People's Republic of China" ("Securities Law"), "Special regulations of the State Council regarding the issue of shares overseas and the listing of shares overseas by companies limited by share" (the "Special Regulations"), "Mandatory provisions for the Articles of Association of the Company to be Listed Overseas" ("Mandatory Provisions"), "Guidelines for Articles of Association of Listed Companies" ("Guidelines on Articles"), "Standards for the Governance of Listed Companies" and other relevant laws and regulations to maintain the legitimate interests of China Petroleum & Chemical Corporation (the "Company") and its shareholders and creditors, and to regulate the organization and conducts of the Company.
- Article 2 These Articles of Association and its appendices of the Company are effective on the date of incorporation of the Company.

From the date on which the Articles of Association and its appendices come into effect, the Articles of Association and its appendices shall constitute a legally binding document regulating the Company's organization and activities, and the rights and obligations between the Company and its shareholders and among the shareholders inter se.

Article 3 These Articles of Association and its appendices are binding on the Company, its shareholders, directors, supervisors and senior management personnel; all of whom are entitled, according to these Articles of Association and its appendices, to make claims concerning the affairs of the Company.

A shareholder may take action against the Company and the Company may take action against a shareholder or a director a supervisor, and a senior management personnel pursuant to these Articles of Association and its appendices. A shareholder may also take action against another shareholder or directors, supervisors, and senior management personnel the Company pursuant to these Articles of Association and its appendices. The actions referred to in the preceding paragraph include court proceedings and arbitration proceedings. Unless otherwise defined in the contexts, senior management personnel referred to in the Articles of Association and its appendices refers to the president, senior vice-president, chief financial officer, vice president, the secretary to the Board and any other person designated by the Company.

Article 4 The Company is a joint stock limited company established in accordance with the Company Law, the Special Regulations and other relevant laws and administrative regulations of the State.

The Company was established by way of promotion with the approval of the State Economic and Trade Commission of the People's Republic of China ("PRC"), as evidenced by approval document "Approval in relation to the Agreement to Establish China Petroleum and Chemical " (Guo Jing Mao Qi Gai [2000] No. [154]). It is registered with and has obtained a business license from China's State Administration Bureau of Industry and Commerce on 25 February 2000 in the People's Republic of China (The "China", for the purpose of this Articles of Association and its appendices, excluding Hong Kong Special Administrative Region, Macau Special Administrative Region and Taiwan). The Company's business license number is: 100000000032985.

The promoter of the Company is: China Petrochemical Corporation.

**Article 5** The registered name of the Company:

In Chinese: 中国石油化工股份有限公司

Abbreviation: "中國石化"

In English: China Petroleum & Chemical Corporation

Abbreviation: SINOPEC Corp.

Article 6 The address of the Company: 22 Chaoyangmen North Street, Chaoyang District, Beijing, China.

Zip: 100728

Tel: (86-10) 59969999

Fax: (86-10) 59760111

Website: WWW.SINOPEC.COM.CN

Article 7 The Company's legal representative is the Chairman of the board of directors of the Company.

**Article 8** The Company is a joint stock limited company which has perpetual existence.

The capital of the Company is divided into shares of equal value. The rights and responsibilities of the Company's shareholders shall only be limited to the proportion of the shares as held by them; the Company shall be responsible for the Company's debts by all of its assets.

The Company is an independent legal person, subject to the jurisdiction and under the protection of the laws and administrative rules of the PRC.

Article 9 In accordance with the Company Law and the Constitution of the Communist Party of China (the "Party"), the Company hereby set up Party organizations and related working organs, and maintain an adequate level of staffing to handle Party affairs as well as sufficient funding necessary for the activities of the Party organizations. The Party organizations play the role of the leadership core and political core in the Company. The Company may set up wholly-owned or holding branch organizations such as subsidiaries, branches, representative offices and offices according to its business development needs. The wholly-owned or holding subsidiary may be named with China Petroleum & Chemical Corporation's abbreviation "SINOPEC". The branches, representative offices and offices are non-legal person branch organizations and shall be named with the full name of China Petroleum & Chemical Corporation.

Article 10 The Company may set up branch organizations (whether or not wholly-owned) outside the PRC and in the Hong Kong SAR, Macau SAR and Taiwan according to its business development needs and upon the approval of the relevant government body.

**Article 11** The Company may invest in other limited liability companies or joint stock limited companies. The Company's liabilities to an invested company shall be limited to the amount of its capital contribution to the invested company.

The Company may invest in other enterprises. However, unless it is otherwise provided for by any law, it shall not be become a capital contributor that shall bear several and joint liabilities for the debts of the enterprises in which it invests.

# CHAPTER 2 THE COMPANY'S OBJECTIVES AND SCOPE OF BUSINESS

- **Article 12** The operation objectives of the Company are: to develop the enterprise, return to shareholders, contribute to the society, and benefit the employees.
- **Article 13** The Company's scope of business shall be consistent with and subject to the scope of business approved by the authority responsible for the registration of the Company.

The Company's scope of business includes: the production, storage, pipeline transportation, land transportation, water transportation and sale of non-coal mines (oil and natural gas etc.), dangerous chemicals (ethylene, propylene, butadiene and naphtha etc.), heavy oil, rubber and other chemical raw materials and products; oil refining; wholesaling and retailing (for subsidiaries only) of gasoline, kerosene and diesel oil; the production, storage, transportation and sale of natural gas chemicals and coal chemicals; sale of lubricant, fuel oil, solvent naphtha and asphalt; production of chemical fertilizer; operation of LPG station, sale of CNG, LNG, LPG and city gas; operation of electrical vehicle charging station; production, supervision of manufacturing, installation of oil and petrochemical machinery and equipment; manufacturing of equipment, tools, instruments and gauges in petroleum drilling and production; purchase and sale of oil and petrochemical raw and auxiliary materials, equipment and parts; technology and information, research, development, application and consultation of alternative energy products; production and sale of electricity, steam, water and industrial gases; wholesaling of farm, forestry and pasture products; operation of general merchandise convenience stores; wholesaling and retailing of knitted garments and housewares; wholesaling and retailing of cultural and sports 4 goods and equipment; sale of food, beverages and tobacco products; wholesaling and retailing of pharmaceuticals and medical devices; retailing of automobiles, motorcycles and components; repair and maintenance of and technical training for automobiles and motorcycles; wholesaling and retailing of machineries, hardware products, electronic products and household appliances; retailing of furniture and materials for indoor decoration; stalls, no-store sale and other forms of retail business; general merchandise retail; accommodation and catering services; manufacturing of food and food additives; residents' services; transportation agency services; warehousing; operation of self-owned properties; leasing of natural gas storage facility; leasing of houses, working places, vehicles and equipment; lease of machineries; media, advertising and acting as commission agent; insurance brokerage and agency services; financial trust and management services; E-commerce; self-operation of and acting as agency for the import and export of various commodities and technologies other than those restricted or prohibited by the state from import and export; contractor of overseas mechanical, electronics, petrochemical projects and domestic international bid-inviting projects; export of equipment and materials required for the aforementioned overseas projects; dispatch of labour required for the aforementioned overseas projects.

#### CHAPTER 3 SHARES AND REGISTERED CAPITAL

- Article 14 There must, at all times, be ordinary shares in the Company, which include the "domestic-invested shares" and the "foreign-invested shares". Subject to the approval of the companies approving department authorized by the State Council, the Company may, according to its requirements, create different classes of shares.
- **Article 15** The shares issued by the Company shall each have a par value of Renminbi one yuan.

"Renminbi" as mentioned above means the legal currency of the PRC.

Article 16 Shares of the Company are in the form of share certificates. Subject to the approval of the securities authority of the State Council, the Company may issue shares to Domestic Investors and Foreign Investors. The issue of shares by the Company shall adhere to the principle of openness and fairness. The shares of the same class shall have the same rights and benefits. The stocks issued at the same time shall be equal in price and shall be subject to the same conditions. The price of each share purchased by any organization or individual shall be the same.

"Foreign Investors" means those investors who subscribe for the Company's shares and who are located in foreign countries and in the regions of Hong Kong, Macau and Taiwan. "Domestic Investors" means those investors who subscribe for the Company's shares and who are located within the territory of the PRC (except the areas referred to above).

Article 17 Shares which the Company issues to domestic investors for subscription in Renminbi are called "Domestic-Invested Shares". Domestic-invested shares listed domestically are called "Domestic-Listed Domestic-Invested shares", known as "A shares".

Shares which the Company issues to foreign investors for subscription in foreign currencies are called "Foreign-Invested Shares". Foreign-invested shares which are listed overseas are called "Overseas-Listed Foreign-Invested Shares".

"Foreign currencies" means the legal currencies of countries or districts outside the PRC which are recognized by the foreign exchange authority of the State and which can be used to pay the share price to the Company.

The shareholders of "A Shares" and the shareholders of "Overseas-Listed Foreign-Invested Shares" shall be shareholders of ordinary shares, possessing the same rights and undertaking the same obligations.

- Foreign-Invested Shares issued by the Company and which are listed in Hong Kong shall be referred to as "H Shares". "H Shares" means the shares which have been admitted for listing on The Stock Exchange of Hong Kong Limited (the "Stock Exchange"), the par value of which is denominated in Renminbi and which are subscribed for and traded in Hong Kong dollars.
- Article 19 The Company's A shares are held on trust by the Shanghai branch of the China Securities Registration and Clearing Company Limited. The Company's H shares are mainly held by the Hong Kong Securities Clearing Company Limited.
- Article 20 With the approval of the examination and approval department authorized by the State Council, the Company may issue 6,880,000 shares, all of which were issued to China Petrochemical Corporation, the promoter of the Company, representing 100% of the issued ordinary shares of the Company at that time, China Petrochemical Corporation satisfied its investment by valued assets, and such capital injection was duly made upon the establishment of the company.
- Article 21 The Company, with the approval of China Securities Regulatory Commission on 24 August 2000, issued to the overseas investors 16,780,488,000 H shares (out of these, 15,102,439,000 shares are new issue shares of the Company and 1,678,049,000 shares are stock shares sold by the promoter, China Petrochemical Corporation) for the first time, and got listed in The Stock Exchange of Hong Kong Limited in October 2000; on 20 June 2001, with the approval of China Securities Regulatory Commission, the Company issued to the domestic investors 2,800,000,000 A shares for the first time and got listed at Shanghai Stock Exchange on 8 August 2001.

The existing structure of the Company's share capital is as follows: the total number of issued ordinary shares of the Company is 121,071,209,646 shares, among which, 95,557,771,046 shares representing 78.93% of the total number of issued ordinary shares of the Company are held by the holders of domestic-listed domestic-invested A shares; and 25,513,438,600 shares representing 21.07% are held by the holder of foreign-listed foreign-invested H shares.

Article 22 The Company's board of directors may take all necessary action for the respective issuance of the Overseas-Listed Foreign-Invested Shares and A Shares after the proposals for issuance of the same have been approved by the securities authority of the State Council.

The Company may implement its proposal to issue Overseas-Listed Foreign-Invested Shares and A Shares pursuant to the preceding paragraph within fifteen (15) months from the date of approval by the securities regulatory organ of the State Council.

- Article 23 Where the total number of shares stated in the proposal for the issuance of shares include Overseas-Listed Foreign-Invested Shares and A Shares, such shares should be fully subscribed for at their respective offerings. If the shares cannot be fully subscribed for all at once due to special circumstances, the shares may, subject to the approval of the securities regulatory organ of the State Council, be issued on separate occasions.
- **Article 24** The registered capital of the Company is RMB 121,071,209,646.
- Article 25 The Company may, based on its operating and development needs, authorize the increase of its capital pursuant to the Company's Articles of Association and its appendices.

The Company may increase its capital in the following ways:

- (1) by offering new shares for subscription by unspecified investors;
- (2) by placing new shares to its existing shareholders;
- (3) by allotting bonus shares to its existing shareholders;
- (4) to increase the share capital with common reserve fund;
- (5) by any other means which is permitted by the laws, administrative regulations and authorized by the securities regulatory authorities of the State Council.

After the Company's increase of share capital by means of the issuance of new shares has been approved in accordance with the provisions of the Articles of Association and its appendices, the issuance thereof should be made in accordance with the procedures set out in the relevant laws and administrative regulations of the State.

Article 26 Unless otherwise stipulated in the relevant laws or administrative regulations, shares in the Company shall be freely transferable and are not subject to any lien.

## CHAPTER 4 REDUCTION OF CAPITAL AND REPURCHASE OF SHARES

- Article 27 According to the provisions of the Articles of Association and its appendices, the Company may reduce its registered capital. In so doing, it shall act according to the Company Law, other relevant provisions and these Articles of Association and its appendices.
- Article 28 The Company must prepare a balance sheet and an inventory of assets when it reduces its registered capital.

The Company shall notify its creditors within ten (10) days of the date of the Company's resolution for reduction of capital and shall publish an announcement in the newspaper(s) designated by the relevant securities regulatory authority in the jurisdiction where the securities of the Company are listed within thirty (30) days of the date of such resolution. A creditor has the right within thirty (30) days of receipt of the notice from the Company or, in the case of a creditor who does not receive such notice, within forty-five (45) days of the date of the announcement, to require the Company to repay its debts or to provide a corresponding guarantee for such debt.

The Company's registered capital may not, after the reduction in capital, be less than the minimum amount prescribed by law.

The Company shall, in case of reducing registered capital, handle the alteration registration in the registration organs in accordance with the law.

- Article 29 The Company may, in accordance with the procedures set out in the Company's Articles of Association and its appendices and with the approval of the relevant governing authority of the State, repurchase its outstanding shares under the following circumstances:
  - (1) cancellation of shares for the purposes of reducing its capital;
  - (2) merging with another company that holds shares in the Company;

- (3) rewarding the employees of the Company;
- (4) requested by any shareholder to purchase his shares because this shareholder objects to the Company's resolution on merger or division made by the assembly of shareholders;
- (5) other circumstances required by laws, administrative regulations and permitted by the State's competent authorities

Apart from the foregoing, the Company shall not purchase its own shares.

The Company shall repurchase its outstanding shares in accordance with the stipulations of Article 29 to Article 32.

- Article 30 The Company may repurchase shares in one of the following ways, with the approval of the relevant governing authority of the State:
  - (1) by making an offer for the repurchase of shares to all its shareholders on a pro rata basis;
  - (2) by repurchasing shares through public dealing on a stock exchange;
  - (3) by repurchasing shares outside of the stock exchange by means of an off-market agreement;
  - (4) by any other means which is permitted by the State's competent authorities.
- Article 31 The Company must obtain the prior approval of the shareholders in a general meeting in the manner stipulated in the Company's Articles of Association and its appendices before it can repurchase shares outside the stock exchange by means of an off-market agreement. The Company may, by obtaining the prior approval of the shareholders in a general meeting (in the same manner), rescind or vary any contract which has been so entered into or waive any right thereof.

A contract for the repurchase of shares referred to in the preceding paragraph includes (without limitation) an agreement to become liable to repurchase shares or an agreement to have the right to repurchase shares.

The Company may not assign any contract for the repurchase of its shares or any right contained in such contract.

Article 32 If the Company purchases shares of the Company due to reasons provided in Articles 28 (I) to (III), such purchase shall be decided by shareholders resolutions pursuant to the Articles of Association and its appendices. Where shares of the Company are purchased in accordance with Item (I) of Article 28, it shall be canceled as of ten days upon its purchase; where shares of the Company are purchased in accordance with Item (II) or (IV), it shall be transferred or canceled within six months upon its purchase. Shares, purchased in line with Item (III) of Article 28, shall not exceed 5% of the total stock volume of the Company; the capital used for its purchase shall come from the after-tax profit hereof; the purchased stock shall be transferred to the staff of the Company within one year. In the event of shares cancellation, the Company shall apply to the original companies registration authority for registration of the change in its registered capital.

The aggregate par value of the cancelled shares shall be deducted from the Company's registered share capital.

Article 33 Unless the Company is in the course of liquidation, it must comply with the following provisions in relation to repurchase of its outstanding shares:

- (1) where the Company repurchases shares at par value, payment shall be made out of book surplus distributable profits of the Company or out of proceeds of a new issue of shares made for that purpose;
- where the Company repurchases shares of the Company at a premium to its par value, payment up to the par value may be made out of the book surplus of distributable profits of the Company or out of the proceeds of a new issue of shares made for that purpose. Payment of the portion in excess of the par value shall be effected as follows:
  - 1. if the shares being repurchased were issued at par value, payment shall be made out of the book surplus of distributable profits of the Company;
  - 2. if the shares being repurchased were issued at a premium to its par value, payment shall be made out of the book surplus of distributable profits of the Company or out of the proceeds of a new issue of shares made for that purpose, provided that the amount paid out of the proceeds of the new issue shall not exceed the aggregate amount of premiums received by the Company on the issue of the shares repurchased nor shall it exceed the book value of the Company's capital common reserve fund account (including the premiums on the new issue) at the time of the repurchase;
- (3) the Company shall make the following payments out of the Company's distributable profits:
  - 1. payment for the acquisition of the right to repurchase its own shares;
  - 2. payment for variation of any contract for the repurchase of its shares;
  - 3. payment for the release of its obligation(s) under any contract for the repurchase of shares;
- (4) after the Company's registered capital has been reduced by the aggregate par value of the cancelled shares in accordance with the relevant provisions, the amount deducted from the distributable profits of the Company for payment of the par value of shares which have been repurchased shall be transferred to the Company's capital common reserve fund account

# CHAPTER 5 FINANCIAL ASSISTANCE FOR ACQUISITION OF SHARES

Article 34 The Company and its subsidiaries shall not, at any time, provide any form of financial assistance to a person who is acquiring or is proposing to acquire shares in the Company. This includes any person who directly or indirectly incurs any obligations as a result of the acquisition of shares in the Company.

The Company and its subsidiaries shall not, at any time, provide any form of financial assistance to the Obligor for the purposes of reducing or discharging the obligations assumed by such person.

This Article shall not apply to the circumstances specified in Article 35 of this Chapter.

- Article 35 For the purposes of this Chapter, "financial assistance" includes (without limitation) the following:
  - (1) gift;
  - (2) guarantee (including the assumption of liability by the guarantor or the provision of assets by the guarantor to secure the performance of obligations by the Obligor), compensation (other than compensation in respect of the Company's own default) or release or waiver of any rights;
  - (3) provision of loan or the making of any other agreement under which the obligations of the Company are to be fulfilled before the obligations of another party, or the change in parties to, or the assignment of rights under, such loan or contract:
  - (4) any other form of financial assistance given by the Company when the Company is insolvent or has no net assets or when its net assets would thereby be reduced to a material extent.

For the purposes of this Chapter, "assumption of obligations" includes the assumption of obligations by way of contract or by way of arrangement (irrespective of whether such contract or arrangement is enforceable or not and irrespective of whether such obligation is to be borne solely by the Obligor or jointly with other persons) or by any other means which results in a change in his financial position.

- **Article 36** The following acts shall not be deemed to be acts prohibited by Article 33 of this Chapter:
  - (1) the provision of financial assistance by the Company where the financial assistance is given in good faith in the interests of the Company, and the principal purpose of which is not for the acquisition of shares in the Company, or the giving of the financial assistance is an incidental part of a master plan of the Company;
  - (2) the lawful distribution of the Company's assets as dividend;
  - (3) the distribution of dividends in the form of shares;
  - (4) a reduction of registered capital, a repurchase of shares of the Company or a reorganization of the share holding structure of the Company effected in accordance with the Articles of Association and its appendices;
  - (5) the provision of loans by the Company within its scope of business and in the ordinary course of its business, where the provision of loans falls within part of the scope of business of the Company (provided that the net assets of the Company are not thereby reduced or that, to the extent that the assets are thereby reduced, the financial assistance is provided out of distributable profits);
  - (6) contributions made by the Company to the employee share ownership schemes (provided that the net assets of the Company are not thereby reduced or that, to the extent that the assets are thereby reduced, the financial assistance is provided out of distributable profits).

## CHAPTER 6 SHARE CERTIFICATES AND REGISTER OF SHAREHOLDERS

**Article 37** Share certificates of the Company shall be in registered form.

The shares of the Company shall bear the following main items:

- (1) Name of the Company;
- (2) Date of registration and establishment of the Company;
- (3) Type of shares, par value and the number of shares it represents;
- (4) Code of share certificates;
- (5) Other matters as required by the Company Law, Special Regulations and the stock exchange on which the shares of the Company are listed.
- Article 38 The shares of the Company may be transferred, donated, inherited and pledged in accordance with the relevant laws, administrative rules, regulations of the competent department(s) as well as these Articles of Association and its appendices

The transfer of shares shall be registered with the share registration organization appointed by the Company.

**Article 39** The Company does not accept the pledging of its shares.

Article 40 Share certificates of the Company shall be signed by the Chairman of the Company's board of directors. Where the stock exchange(s) on which the Company's shares are listed require other directors and/or supervisors, and senior management personnel of the Company to sign on the share certificates, the share certificates shall also be signed by such officer(s). The share certificates shall take effect after being sealed or imprinted with the seal of the Company (or the Company chop for securities), or with the seal sign (or the Company's specific security seal) in printed form. The share certificate shall only be sealed with the Company's seal or securities chop under the authorization of the board of directors. The signatures of the Chairman of the board of directors or other officer(s) of the Company may be printed in printed form.

Where the stock of the Company is issued and/or traded without share certificate in printed form, it shall be in accordance with the regulations of the securities regulatory and management institutions of the Company's listing place.

- **Article 41** The Company shall keep a register of shareholders which shall contain the following particulars:
  - (1) the name (title) and address (residence), the occupation or nature of each shareholder;
  - (2) the class and quantity of shares held by each shareholder;
  - (3) the amount paid-up on or agreed to be paid-up on the shares held by each shareholder;
  - (4) the share certificate number(s) of the shares held by each shareholder;
  - (5) the date on which each person was registered as a shareholder;
  - (6) the date on which any shareholder ceased to be a shareholder.

Unless there is evidence to the contrary, the register of shareholders shall be sufficient evidence of the shareholders' shareholdings in the Company.

Article 42 The Company may, in accordance with the mutual understanding and agreements made between the securities regulatory organ of the State Council and overseas securities regulatory organizations, maintain the register of shareholders of Overseas-Listed Foreign-Invested Shares overseas and appoint overseas agent(s) to manage such register of shareholders. The original register of shareholders for holders of H Shares shall be maintained in Hong Kong.

A duplicate register of shareholders for the holders of Overseas-Listed Foreign-Invested Shares shall be maintained at the Company's residence. The appointed overseas agent(s) shall ensure consistency between the original and the duplicate register of shareholders at all times.

If there is any inconsistency between the original and the duplicate register of shareholders for the holders of Overseas-Listed Foreign-Invested Shares, the original register of shareholders shall prevail.

- **Article 43** The Company shall have a complete register of shareholders which shall comprise the following parts:
  - (1) the register of shareholders which is maintained at the Company's residence (other than those share registers which are described in sub-paragraphs (2) and (3) of this Article);
  - (2) the register of shareholders in respect of the holders of Overseas-Listed Foreign-Invested Shares of the Company which is maintained in the same place as the overseas stock exchange on which the shares are listed; and
  - (3) the register of shareholders which is maintained in such other place as the board of directors may consider necessary for the purposes of the listing of the Company's shares.
- Article 44 Different parts of the register of shareholders shall not overlap. No transfer of any shares registered in any part of the register shall, during the continuance of that registration, be registered in any other part of the register. Amendments or rectification of the register of shareholders shall be made in accordance with the laws of the place where the register of shareholders is maintained.

All H Shares which have been fully paid-up may be freely transferred in accordance with the Articles of Association and its appendices. However, unless such transfer complies with the following requirements, the board of directors may refuse to recognize any document of transfer and would not need to provide any reason therefor:

- (1) a fee of HK\$2.50 per instrument of transfer or such higher amount agreed by the Stock Exchange has been paid to the Company for registration of the instrument of transfer and other documents relating to or which will affect the right of ownership of the shares;
- (2) the document of transfer only relates to Overseas-Listed Foreign-Invested Shares listed in Hong Kong;
- (3) the stamp duty which is chargeable on the document of transfer has already been paid;
- (4) the relevant share certificate(s) and any other evidence which the board of directors may reasonably require to show that the transferor has the right to transfer the shares have been provided;
- (5) if it is intended that the shares be transferred to joint owners, the maximum number of joint owners shall not be more than four (4); and
- (6) the Company does not have any lien on the relevant shares.

All H Shares listed in Hong Kong shall be transferred by an instrument in writing in any usual or common form or any other form which the directors may approve. The instrument of transfer of any share may be executed by hand without seal, or if the assignor or the assignee is the recognized clearing house as defined in the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) ("Recognized Clearing house") or its nominee, the share transfer form may be executed by hand or in mechanically-printed form.

- Article 45 No change may be made in the register of shareholders as a result of a transfer of shares within thirty (30) days prior to the date of a shareholders' general meeting or within five (5) days before the determination date for the Company's distribution of dividends. Amendments or rectification of the A share register of shareholders shall be made in accordance with the domestic laws and regulations.
- Article 46 When the Company needs to convene a shareholders' meeting for the purposes of determination, dividend distribution, for liquidation or for any other purpose which need to determine shareholdings, the convenor of the board of directors or shareholders' general meeting shall determine a record date for the determination of shareholdings. The shareholders of the Company shall be such persons who appear in the register of shareholders at the close of such record date.
- Article 47 Any person who disputes the register of shareholders and asks for inclusion of his name in or removal of his name from the register of shareholders may apply to a court of competent jurisdiction for rectification of the register.
- Article 48 For any person who is a registered shareholder or who claims to be entitled to have his name (title) entered in the register of shareholders in respect of shares in the Company may, if his share certificate (the "original certificate") relating to the shares is lost, he may apply to the Company for a replacement share certificate in respect of such shares (the "Relevant Shares").

Application by a holder of A Shares, who has lost his share certificate, for a replacement share certificate shall be dealt with in accordance with Article 144 of the Company Law.

Application by a holder of Overseas-Listed Foreign-Invested Shares, who has lost his share certificate, for a replacement share certificate may be dealt with in accordance with the law of the place where the original register of shareholders of holders of Overseas-Listed Foreign-Invested Shares is maintained, the rules of the stock exchange or other relevant regulations.

The issue of a replacement share certificate to a holder of H Shares, who has lost his share certificate, shall comply with the following requirements:

- (1) The applicant shall submit an application to the Company in a prescribed form accompanied by a notarial certificate or a statutory declaration, of which the contents shall include the grounds upon which the application is made and the circumstances and evidence of the loss, and the declaration showing that no other person is entitled to have his name entered in the register of shareholders in respect of the Relevant Shares.
- (2) The Company has not received any declaration made by any person other than the applicant declaring that his name shall be entered in the register of shareholders in respect of such shares before it decides to issue a replacement share certificate to the applicant.
- (3) The Company shall, if it intends to issue a replacement share certificate, publish a notice of its intention to do so at least once every thirty (30) days within a period of ninety (90) consecutive days in such newspapers as may be prescribed by the board of directors.
- (4) The Company shall, prior to publication of its intention to issue a replacement share certificate, deliver to the stock exchange on which its shares are listed, a copy of the notice to be published and may publish the notice upon receipt of confirmation from such stock exchange that the notice has been exhibited in the premises of the stock exchange for a period of ninety (90) days.
  - In the case of an application which is made without the consent of the registered holder of the Relevant Shares, the Company shall deliver by mail to such registered shareholder a copy of the notice to be published.
- (5) If, by the expiration of the 90-day period referred to in paragraphs (3) and (4) of this Article, the Company has not received any objection from any person in respect of the issuance of the replacement share certificate, it may issue a replacement share certificate to the applicant pursuant to his application.
- (6) Where the Company issues a replacement share certificate pursuant to this Article, it shall forthwith cancel the original share certificate and document the cancellation of the original share certificate and issuance of a replacement share certificate in the register of shareholders accordingly.
- (7) All expenses relating to the cancellation of an original share certificate and the issuance of a replacement share certificate shall be borne by the applicant and the Company is entitled to refuse to take any action until reasonable guarantee is provided by the applicant therefor.
- Article 49 Where the Company issues a replacement share certificate pursuant to the Articles of Association and its appendices, as for a bona fide purchaser obtaining new share certificates referred to above or a shareholder registered as a owner of the shares (in case of a bona fide purchaser), his name (title) shall not be removed from the register of shareholders.
- Article 50 The Company shall not be liable for any damages sustained by any person by reason of the cancellation of the original share certificate or the issuance of the replacement share certificate unless the claimant is able to prove that the Company has acted in a deceitful manner.

## CHAPTER 7 SHAREHOLDERS' RIGHTS AND OBLIGATIONS

**Article 51** A shareholder of the Company is a person who lawfully holds shares in the Company and whose name (title) is entered in the register of shareholders.

A shareholder shall enjoy rights and assume obligations according to the class and amount of shares held by him; shareholders who hold shares of the same class shall enjoy the same rights and assume the same obligations.

For the joint shareholders, if one of the joint shareholders has passed away, the surviving shareholder shall be deemed by the Company to have the ownership of the related shares, but the Board of Directors is entitled to ask for the provision of the suitable death certificate for the purpose of revision of the shareholders' register. For the joint shareholders, only the first named shareholder in the shareholders' register has the right to receive the share certificates of the related shares, receive the notice of the Company, attend the shareholders' general meeting and exercise his voting right; while, any notice delivered to the said shareholder shall be deemed as if the notice has been delivered to all of the joint shareholder of the related shares.

## **Article 52** The shareholders of ordinary shares of the Company shall enjoy the following rights:

- (1) the right to receive dividends and other distributions in proportion to their shareholdings;
- (2) the right to require, convene, preside, attend or appoint a proxy to attend shareholders' general meetings and to performing the relevant voting rights;
- (3) the right to supervise the Company's business operations, the right to present proposals or to raise queries;
- (4) the right to transfer, donate and pledge shares in accordance with laws, administrative regulations and provisions of the Articles of Association and its appendices;
- (5) subject to production of the relevant proofs of the type and quantity of shares that they are holding to the Company and verification of their identities of shareholders by the Company, the right to obtain relevant information in accordance with laws, administrative regulations and provisions of these Articles of Association and its appendices, in which information includes:
  - the right to obtain a copy of the Articles of Association and its appendices, subject to payment of costs;
  - ii. the right to inspect and copy, subject to payment of a reasonable fee:
    - (i) all parts of the register of shareholders;
    - (ii) personal particulars of each of the Company's directors, supervisors, senior management personnel including:
      - (a) present and former name and alias;
      - (b) principal address (place of residence);
      - (c) nationality;
      - (d) primary and all other part-time occupations and duties;
      - (e) identification documents and the numbers thereof;
    - (iii) report on the state of the Company's share capital;
    - (iv) counterfoil of the Company's debenture;
    - (v) reports showing the aggregate par value, quantity, highest and lowest price paid in respect of each class of shares repurchased by the Company since the last accounting year and the aggregate amount paid by the Company for this purpose;

- (vi) minutes of shareholders' general meetings, resolutions of the directors meetings and supervisors meetings, and financial statements;
- (6) in the event of the termination or liquidation of the Company, the right to participate in the distribution of remaining assets of the Company in accordance with the number of shares held;
- (7) the right to demand the Company to withdraw the shares of the shareholder who raise an objection to the merger and division resolution made in the shareholders' meeting;
- (8) in the event that the resolution of a shareholders' general meeting or board meeting is against the law or administrative rules and has infringed the legitimate interest of a shareholder, the shareholder shall have the right to commence legal proceedings to stop the illegal or infringing act and to ask the Company to bring a claim for compensation
- (9) other rights conferred by laws, administrative regulations and the Articles of Association and its appendices.
- **Article 53** The shareholders of ordinary shares of the Company shall assume the following obligations:
  - (1) to comply with these Articles of Association and its appendices;
  - (2) to pay subscription money according to the number of shares subscribed and the method of subscription;
  - (3) not to retire from being a shareholder unless required by law or administrative regulations;
  - (4) not to abuse the shareholder's right to infringe the interest of the Company or other shareholders; not to abuse the independent position of the legal person and the limited liability of the shareholder of the Company to impair the interest of the creditor of the Company; where the shareholder's abuse of its power has caused damage to other shareholders, it shall honor its compensation obligations in accordance with the law; where the shareholder's abuse of its independent position and shareholder's limited liability and evasion of its debt have caused serious damage to the creditor's interest, it shall bear joint liability upon the debt of the company.
  - (5) other obligations imposed by laws, administrative regulations and the Articles of Association and its appendices

Shareholders are not liable to make any further contribution to the share capital other than according to the terms which were agreed by the subscriber of the relevant shares at the time of subscription.

- Article 54 In addition to the obligations imposed by laws and administrative regulations or required by the listing rules of the stock exchange on which the Company's shares are listed, a controlling shareholder shall not exercise his voting rights in respect of the following matters in a manner prejudicial to the interests of all or part of the shareholders of the Company:
  - (1) act honestly in the best interests of the Company in removing a director or supervisor;
  - (2) to approve the expropriation by a director or supervisor (for his own benefit or for the benefit of another person) of the Company's assets in any way, including (without limitation to) opportunities which are beneficial to the Company;
  - (3) to approve the expropriation by a director or supervisor (for his own benefit or for the benefit of another person) of the individual interest of other shareholders, including (but without limitation to) rights to distributions and voting rights (excluding a restructuring which has been submitted for approval by the shareholders in a general meeting in accordance with the Articles of Association and its appendices).

- **Article 55** For the purpose of the foregoing Article, a "controlling shareholder" means a person who satisfies any one of the following conditions:
  - a person who, acting alone or in concert with others, has the power to elect more than half of the board of directors;
  - (2) a person who, acting alone or in concert with others, has the power to exercise 30% or more or has power to control the exercise of 30% or more of the voting rights in the Company;
  - (3) a person who, acting alone or in concert with others, holds 30% or more of the issued and outstanding shares of the Company;
  - (4) a person who, acting alone or in concert with others, has de facto control of the Company in any other way.
- Article 56 The controlling shareholders, the actual shareholding controllers, directors, supervisors and senior management personnel shall not abuse their correlative relationship to cause damage to the Company. Where they cause damage to the Company due to breach of rules, they shall bear their compensation obligations.

The controlling shareholders and the actual shareholding controllers shall act faithfully and assume responsibility to the company and other public shareholders. The controlling shareholders shall fulfil strictly the rights of subscriber and buyer in accordance with the laws, shall not impair lawful rights of the Company and other public shareholders by such means as interest distribution, capital reorganization, foreign investment, occupation of funds, loan guarantee, and shall not utilize its controlling position to cause damage to the interest of the Company and other public shareholders.

An "actual controller" refers to anyone who is not a shareholder but is able to hold actual control of the acts of the Company by means of investment relations, agreements or any other arrangements.

"Connection relationship" refers to the relationship between the controlling shareholders, actual controllers, directors, supervisors, or senior management personnel of the Company and the enterprise directly or indirectly controlled thereby and any other relationship that may lead to the transfer of any interest of the Company. However, the enterprises controlled by the state do not incur a connection relationship simply because their shares are controlled by the state.

## CHAPTER 8 SHAREHOLDERS' GENERAL MEETINGS

Article 57 The shareholders' general meeting is the organ of authority of the Company and shall exercise its functions and powers in accordance with law.

The Company shall formulate "Rules and Procedures for the Shareholders' General Meetings" for implementation after being approved by the shareholders in a general meeting. The Rules and Procedures for the Shareholders' General Meetings shall include the followings:

- (1) functions and powers of the shareholders general meetings;
- (2) authorities given by the shareholders' general meetings to the board of directors;
- (3) procedures for the convening of a shareholders' general meeting, which include the putting forward and collection of motions, and notices of meetings and any change thereto, registration of the meeting, convening of, voting and resolutions made in the meeting, adjournments, past-session matters and announcements, etc.;
- (4) other matters deemed necessary by the shareholders' general meeting.

The Rules and Procedures for the Shareholders' General Meetings is an integral part of and has the same legal effect as these Articles of Association and its appendices, to be decided by the Board of Directors and approved at the Shareholders General Meetings.

#### **Article 58** The shareholders' general meeting shall have the following functions and powers:

- (1) to decide on the Company's operational policies and investment plans;
- (2) to elect and replace directors and to decide on matters relating to the remuneration of directors;
- (3) to elect and replace supervisors assumed by non-representatives of the employees and to decide on matters relating to the remuneration of supervisors;
- (4) to examine and approve the board of directors' reports;
- (5) to examine and approve the supervisory committee's reports;
- (6) to examine and approve the Company's profit distribution plans and loss recovery plans;
- (7) to examine and approve the Company's proposed annual preliminary and final financial budgets;
- (8) to pass resolutions on the increase or reduction of the Company's registered capital;
- (9) to pass resolutions on matters such as merger, division, dissolution, liquidation or change of the corporate form of the Company;
- (10) to pass resolutions on the issue of debentures by the Company;
- (11) to pass resolutions on the appointment, dismissal and non-reappointment of the accountants of the Company;
- (12) to amend the Articles of Association and its appendices and its appendices (including the Rules and Procedures for the Shareholders' General Meetings, Rules and Procedures for the Board of Directors' Meetings and Rules and Procedures for the Supervisors' Meetings);
- (13) to consider motions raised by the supervisory committee or shareholders who represent 3% or more of the total number of voting shares of the Company;
- (14) to examine and approve the guarantee particulars prescribed in Article 58;
- (15) to examine such proceedings as the purchased and sold assets in one year by the Company exceed 30% of the audited total assets of the Company of the latest term;
- (16) to examine, approve and alter the proceedings for the usage of the collected fund;
- (17) to examine stock-based incentive plan; and
- (18) to decide on other matters which, according to laws, administrative regulations, regulations of the competent department(s) or the Articles of Association and its appendices, need to be approved by shareholders in general meetings;

# Article 59 The below external guarantee acts shall be approved by the shareholders' general meeting.

- (1) any guarantee after the total external guarantee volume of the Company and its controlling subsidiaries r36eaches or exceeds 50% of the latest audited net assets of the latest term;
- any guarantee after the total external guarantee volume of the Company reaches or exceeds 30% of the latest audited net assets of the latest term;
- (3) the guarantee provided to the guarantee objective whose asset liability ratio exceeds 70%;

- (4) the single guarantee volume exceeds 5% of the latest audited net assets;
- (5) the guarantee provided to shareholders, the actual controller and connected persons;
- (6) any other external guarantee regulated by laws, administrative regulations, rules of competent authorities and regulatory rules of the listing place.
- Article 60 Matters which shall be determined by the shareholders in a general meeting according to the laws, administrative regulations, regulations of the competent departments or the Articles of Association and its appendices must be discussed by the shareholders in a general meeting in order to protect the shareholders' right of decision on those matters. Where necessary and reasonable, the board of directors, directors or its secretary may be appointed in a shareholders' general meeting to determine (if so authorized in the general meeting) specific matters which are related to the matters to be resolved and are not possible or not necessary to be determined in that general meeting. Please see the Rules and Procedures for the Shareholders' General Meetings for the form of authorization by shareholders to the board of directors in a shareholders' general meeting to determine major matters of the Company.

If the shareholders authorize the board of directors, directors or its secretary in a general meeting to determine matters which shall be determined by ordinary resolutions, the matter should be resolved by more than one-half of the attending shareholders (including their proxy) who have voting rights; if the authorization relates to matters which shall be determined by special resolutions, the matter should be resolved by more than two-thirds of the attending shareholders (including their proxy) who have voting rights. The authorization should be clear and specific.

- Article 61 Unless prior approval of shareholders in the form of a special resolution is obtained in a general meeting, the Company shall not enter into any contract with any person other than the directors, supervisors, senior management personnel pursuant to which such person shall be responsible for the management and administration of the whole or any substantial part of the Company's business.
- Article 62 Shareholders' general meetings are divided into annual general meetings ("AGM") and extraordinary general meetings ("EGM"). Unless otherwise provided in the Articles of Association and its appendices and the Rules and Procedures for the Shareholders' General Meetings, shareholders' general meetings shall be convened by the board of directors.
- Article 63 AGMs are held once every year and within six (6) months from the end of the preceding accounting year. At least the following matters should be resolved in an AGM:
  - (1) examination of the board of directors' annual report;
  - (2) examination of the supervisory committee's annual report;
  - (3) examination of the Company's profit distribution proposal;
  - (4) examination of the Company's audited final budgets for the preceding year;
  - (5) engagement, removal or non-renewal of the appointment of the accounting firm by the Company and determination of the remuneration of the accounting firm so engaged.

Matters to be considered in an AGM including but without limitation to the above matters, and any matter that could be considered in a general meeting may be considered in an AGM.

- **Article 64** The board of directors shall convene an EGM within two (2) months after the occurrence of any one of the following events:
  - (1) where the number of directors is less than the number stipulated in the Company Law or two-thirds of the number specified in the Articles of Association and its appendices;
  - (2) where the unrecovered losses of the Company amount to one-third of the total amount of its actually received share capital;

- (3) where shareholder(s) who individually or jointly hold 10% or more of the Company's issued and outstanding voting shares request(s) in writing for the convening of an EGM;
- (4) whenever the board of directors deems necessary or the supervisory committee so requests;
- (5) other circumstances provided by laws, administrative regulations, regulations from competent authorities and the Articles of Association and its appendices

The shareholdings referred to in item (3) above shall be calculated on the basis of number of shares held as at the date of written request of the shareholders.

- Article 65 The place for convention of the shareholders' general meeting shall be: city where the Company's registered address is or any other place designated by the board of directors. The shareholders' general meeting shall prepare the meeting place and be convened in the form of on-site meeting. The Company could also provide Internet or other means for the convenient attendance of the shareholders, and clearly state the voting time, procedures and the means to identify the shareholders in the notice of the shareholders' general meeting if the Internet or other means is adopted as voting method. Such shareholders as attend the meeting by the aforesaid means shall be deemed presence.
- Article 66 Any request for the board of directors to hold an AGM or class meeting made by the supervisory committee or shareholders who individually or jointly hold 10% of the Company's voting shares entitling them to vote in that proposed meeting shall be dealt with according to the provisions of the Rules and Procedures for the Shareholders' General Meetings.

If a meeting is lawfully convened by the shareholders themselves where the board of directors has not given the required consent under the Rules and Procedures for the Shareholders' General Meetings to the same, the reasonable expenses thus incurred shall be borne by the Company and paid out of the money payable by the Company to the negligent director(s).

- Article 67 When the Company convenes a shareholders' general meeting, a notice of the meeting shall be given forty-five (45) days (including the date of the meeting) before the date of the meeting. The contents, form and issuing procedures of the notice shall comply with the requirements of the Rules and Procedures for the Shareholders' General Meetings.
- Article 68 All shareholders or their agent registered on the stock registration date have the right to attend the shareholders' general meeting and make resolution in accordance with the relevant laws, rules and the Articles of Association and its appendices. Any shareholder who is entitled to attend and vote at a general meeting may attend the shareholders' general meeting of their own, or appoint one (1) or more persons (whether such person is a shareholder or not) as his proxy or proxies to attend and vote on his behalf, and a proxy so appointed shall be entitled to exercise the following rights pursuant to the authorization from that shareholder:
  - (1) the shareholders' right to speak at the meeting;
  - (2) the right to demand or join in demanding a poll;
  - (3) the right to vote by hand or on a poll, but a proxy of a shareholder who has appointed more than one (1) proxy may only vote on a poll.

If the said shareholder is a Recognized Clearing House), the shareholder may authorize one or more suitable person to act as its representative at any shareholders' general meeting or any kinds of shareholders' general meeting; however, if more than one person are authorized, the power of attorney shall clearly indicate the number and types of the stocks involved by way of the said authorization. The persons after such authorization may represent the recognized clearing house (or its "proxy") to exercise the rights, as if they were the individual shareholders of the Company.

- Article 69 The instrument appointing a proxy to attend the general meeting shall be in writing clearly indicating the number of shares of the appointor represented by the proxy and shall be under the hand of the appointor or his attorney duly authorized in writing, or if the appointor is a legal person, either under seal or under the hand of a director or a duly authorized attorney. If several proxies are appointed, such written instrument shall clearly indicate the number of shares of the appointor represented by each proxy. The remaining contents and form of the instrument shall comply with the requirements of the Rules and Procedures for the Shareholders' General Meetings.
- Article 70 Any form given to a shareholder by the directors for use by such shareholder for the appointment of a proxy to attend and vote at meetings of the Company shall be such as to enable the shareholder to freely instruct the proxy to vote in favour of or against the motions, such instructions being given in respect of each individual matter to be voted on at the meeting. Such a form shall contain a statement that, in the absence of specific instructions from the shareholder, the proxy may vote as he thinks fit.
- Article 71 A vote made in accordance with the terms of a proxy shall be valid notwithstanding the death or loss of capacity of the appointor or revocation of the proxy or the authority under which the proxy was executed, or the transfer of the shares in respect of which the proxy is given, provided that the Company did not receive any written notice in respect of such matters before the commencement of the relevant meeting.
- Article 72 The Company's board of directors, independent directors and shareholders who meet the relevant requirements may collect from other shareholders of the Company the rights to vote in a shareholders' general meeting. The collection of voting rights shall be without consideration with sufficient disclosure of information to the shareholders from whom voting rights are being collected.
- Article 73 Where the shareholders' general meeting is deliberation the connected transactions, the shareholders who are connected persons shall not participate in the vote, and the number of its represented stock shall not be calculated in the total number of valid votes; the announcement of the shareholders' general meeting shall fully reveal the vote of the shareholders who are not connected persons.

If any shareholder are required to abstain from voting or may only vote for or against a matter according to the Rules Governing the Listing of Securities of the Hong Kong Stock Exchange Limited, any vote by such shareholder or his proxy in violation of the relevant rules or restrictions referred to above shall not be counted in the voting results.

Article 74 A shareholder (including a proxy), when voting at a shareholders' general meeting, may exercise such voting rights as are attached to the number of voting shares which he represents except when the accumulated voting system under Article 102 hereof regarding election of directors is adopted in which case one (1) vote is attached to each share. Please refer to the Rules and Procedures for the Shareholders' General Meetings for the implementation of the accumulated voting system.

Shares of the Company held by the Company shall not enjoy voting rights and shall not be calculated in the total number of shares with voting rights held by the present shareholders.

- Article 75 At any shareholders' general meeting, a resolution shall be decided on a show of hands unless a poll is demanded or otherwise required by the listing rules of the stock exchanges on which the Company's shares are listed:
  - (1) by the chairman of the meeting;
  - (2) by at least two (2) shareholders present in person or by proxy entitled to vote thereat;
  - (3) by one (1) or more shareholders present in person or by proxy and representing 10% or more of all shares carrying the right to vote at the meeting singly or in aggregate, before or after a vote is carried out by a show of hands.

Unless a poll is demanded, a declaration by the chairman that a resolution has been passed on a show of hands and the record of such in the minutes of the meeting shall be conclusive evidence of the fact that such resolution has been passed. There is no need to provide evidence of the number or proportion of votes in favour of or against such resolution.

The demand for a poll may be withdrawn by the person who demands the same.

- Article 76 A poll demanded on the election of the chairman of the meeting, or on a question of adjournment of the meeting, shall be taken forthwith. A poll demanded on any other question shall be taken at such time as the chairman of the meeting directs, and any business other than that upon which a poll has been demanded may be proceeded with, pending the taking of the poll. The result of the poll shall be deemed to be a resolution of the meeting at which the poll was demanded.
- Article 77 On a poll taken at a meeting, a shareholder (including a proxy) entitled to two (2) or more votes need not cast all his votes in the same way.
- **Article 78** In the case of an equality of votes, whether on a show of hands or on a poll, the chairman of the meeting at which the show of hands takes place or at which the poll is demanded shall have a casting vote.
- **Article 79** Resolutions of shareholders' general meetings shall be divided into ordinary resolutions and special resolutions.

An ordinary resolution must be passed by votes representing more than one-half of the voting rights represented by the shareholders (including their proxy) present at the meeting.

A special resolution must be passed by votes representing more than two-thirds of the voting rights represented by the shareholders (including their proxy) present at the meeting.

The shareholders (including their proxy) attending the meeting shall clearly show approval or objection to every matter to be voted on. As for the unpolled vote or abstention, the Company will not treat it as the vote with voting right when calculating the voting result of this matter.

- **Article 80** The following matters shall be resolved by an ordinary resolution at a shareholders' general meeting:
  - (1) work reports of the board of directors and the supervisory committee;
  - (2) profit distribution plans and loss recovery plans formulated by the board of directors;
  - (3) appointment and removal of members of the board of directors and supervisors assumed by non-representatives of the employees, their remuneration and manner of payment
  - (4) annual preliminary and final budgets, balance sheets and profit and loss accounts and other financial statements of the Company;
  - (5) matters other than those which are required by the laws and administrative regulations or by the Articles of Association and its appendices to be adopted by special resolution.
- **Article 81** The following matters shall be resolved by a special resolution at a shareholders' general meeting:
  - (1) the increase or reduction in share capital and the issue of shares of any class, warrants and other similar securities;
  - (2) the issue of debentures of the Company;
  - (3) the division, merger, dissolution, change of corporate form and liquidation of the Company;
  - (4) amendment of the Articles of Association and its appendices and its appendices;
  - (5) where the purchase or sale of assets or amount of guarantee exceeds 30% of the latest audited total assets;
  - (6) stock incentive plan;
  - (7) any other matters required by laws, administrative regulations or the Articles of Association and its appendices, and those considered by the shareholders in general meeting, and resolved by way of an ordinary resolution, to be of a nature which may have a material impact on the Company and should be adopted by special resolutions.

- Article 82 The chairman of the meeting shall be responsible for determining whether a resolution has been passed. His decision, which shall be final and conclusive, shall be announced at the meeting and recorded in the minutes.
- Article 83 If the chairman of the meeting has any doubt as to the result of a resolution which has been put to vote at a shareholders' meeting, he may have the votes counted. If the chairman of the meeting has not counted the votes, any shareholder who is present in person or by proxy and who objects to the result announced by the chairman of the meeting may, immediately after the declaration of the result, demand that the votes be counted and the chairman of the meeting shall have the votes counted immediately.
- **Article 84** If votes are counted at a shareholders' general meeting, the result of the count shall be recorded in the minutes.
- Article 85 The convenor should be responsible for the authenticity, accuracy and completeness of the minutes of meetings. The present directors, supervisors, secretary of the board of directors, the convener or its agent, and the presider shall sign their names in the minutes of the meeting. The contents and form of the records of meeting shall comply with the requirements of the Rules and Procedures for the Shareholders' General Meetings.

The minutes of the shareholders' general meetings, together with the shareholders' attendance lists and proxy forms, other valid information in relation to the voting by way of Internet or other means shall be treated as a Company file and kept by the secretary of the board of directors at the Company's place of residence for at least 10 years.

- Article 86 Copies of the minutes of proceedings of any shareholders' meeting shall, during business hours of the Company, be open for inspection by any shareholder without charge. If a shareholder requests for a copy of such minutes from the Company, the Company shall send a copy of such minutes to him within seven (7) days after receipt of reasonable fees therefor.
- Article 87 Where the shareholders' general meeting passes the resolutions including bonus in cash, bonus in shares or converted and increased capital stock of cumulative fund, the Company shall give effect to the detailed plan within two years after the conclusion of the shareholders' general meeting. In respect of the aforesaid profit distribution plan, the board of directors of the Company shall complete the issue and distribution of dividend (or shares) within two months as of the convention of the shareholders' general meeting.

## CHAPTER 9 SPECIAL PROCEDURES FOR VOTING BY A CLASS OF SHAREHOLDERS

- **Article 88** Those shareholders who hold different classes of shares are class shareholders.
  - Class shareholders shall enjoy rights and assume obligations in accordance with laws, administrative regulations and the Articles of Association and its appendices.
- Article 89 Rights conferred on any class of shareholders ("class rights") may not be varied or abrogated save with the approval of a special resolution of shareholders in a general meeting and by holders of shares of that class at a separate meeting conducted in accordance with Articles 90 to 94 hereof.
- **Article 90** The following circumstances shall be deemed to be variation or abrogation of the rights attaching to a particular class of shares:
  - (1) to increase or decrease the number of shares of that class, or to increase or decrease the number of shares of a class having voting or equity rights or privileges distribution or superior to those of shares of that class;

- (2) to exchange all or part of the shares of that class for shares of another class or to exchange or to create a right to exchange all or part of the shares of another class for shares of that class;
- (3) to remove or reduce rights to accrued dividends or rights to cumulative dividends attached to shares of that class;
- (4) to reduce or remove preferential rights attached to shares of that class to receive dividends or to the distribution of assets in the event that the Company is liquidated;
- to add, remove or reduce conversion privileges, options, voting rights, transfer or pre-emptive rights, or rights to acquire securities of the Company attached to shares of that class;
- (6) to remove or reduce rights to receive payment payable by the Company in specific currencies attached to shares of that class:
- (7) to create a new class of shares having voting or distribution rights or privileges equal or superior to those of the shares of that class;
- (8) to restrict the transfer or ownership of shares of that class or to increase the types of restrictions attaching thereto;
- (9) to issue rights to subscribe for, or to convert the existing shares into, shares in the Company of that class or another class:
- (10) to increase the rights or privileges of shares of another class;
- (11) to restructure the Company in such a way so as to result in the disproportionate distribution of obligations between the various classes of shareholders;
- (12) to vary or abrogate the provisions of this Chapter.
- Article 91 Affected class shareholders, whether or not otherwise having the right to vote at shareholders' general meetings, have the right to vote at class meetings in respect of matters concerning sub-paragraphs (2) to (8), (11) and (12) of Article 89 hereof, but interested shareholder(s) shall not be entitled to vote at such class meetings.
  - "(An) interested shareholder(s)", as such term is used in the preceding paragraph, means:
  - (1) in the case of a repurchase of shares by way of a general offer to all shareholders of the Company or by way of public dealing on a stock exchange pursuant to Article 29 hereof, an interested shareholder is a "controlling shareholder" within the meaning of Article 54 hereof;
  - (2) in the case of a repurchase of shares by an off-market agreement pursuant to Article 29 hereof, a holder of the shares to which the proposed agreement relates;
  - in the case of a restructuring of the Company, a shareholder who assumes a relatively lower proportion of obligation than the obligations imposed on shareholders of that class under the proposed restructuring or who has an interest in the proposed restructuring different from the general interests of the shareholders of that class.
- Article 92 Resolutions of a class of shareholders shall be passed by votes representing more than two-thirds of the voting rights of shareholders of that class represented at the relevant meeting who, according to Article 90, are entitled to vote thereat.
- Article 93 A written notice of a class meeting shall be given to all shareholders who are registered as holders of that class in the register of shareholders forty-five (45) days before the date of the class meeting (not including the date of meeting). Such notice shall give such shareholders notice of the matters to be considered at such meeting, the date and the place of the class meeting. A shareholder who intends to attend the class meeting shall deliver his written reply in respect thereof to the Company twenty (20) days before the date of the class meeting.

If the shareholders who intend to attend such class meeting represent more than half of the total number of shares of that class which have the right to vote at such meeting, the Company may hold the class meeting; if not, the Company shall within five (5) days give the shareholders further notice of the matters to be considered, the date and the place of the class meeting by way of public announcement. The Company may then hold the class meeting after such public announcement has been made.

Article 94 Notice of class meetings need only be served on shareholders entitled to vote thereat.

Class meetings shall be conducted in a manner which is as similar as possible to that of shareholders' general meetings. The provisions of the Articles of Association and its appendices relating to the manner for the conduct of shareholders' general meetings are also applicable to class meetings.

Article 95 Apart from the holders of other classes of shares, the holders of the A Shares and holders of Overseas-Listed Foreign-Invested Shares shall be deemed to be holders of different classes of shares.

The special procedures for approval by a class of shareholders shall not apply in the following circumstances:

- (1) where the Company issues, upon the approval by special resolution of its shareholders in a general meeting, either separately or concurrently once every twelve (12) months, not more than 20% of each of its existing issued A Shares and Overseas-Listed Foreign-Invested Shares; or
- (2) where the Company's plan to issue A Shares and Overseas-Listed Foreign-Invested Shares at the time of its establishment is carried out within fifteen (15) months from the date of approval of the securities regulatory organ of the State Council.

## CHAPTER 10 BOARD OF DIRECTORS

**Article 96** The Company shall have a board of directors which is accountable to shareholders.

The Company shall set forth Rules and Procedures for the Board of Directors' Meetings for implementation after being approved by the shareholders in a general meeting. The Rules and Procedures for the Board of Directors' Meetings shall include the following items:

- (1) functions and powers and authorizations of the board of directors;
- (2) establishment of the board of directors and its subordinated offices;
- (3) secretary of the board of directors;
- (4) discussion system of a board meeting;
- (5) discussion procedures of a board meeting;
- (6) disclosure of information of a board meeting;
- (7) implementation and feedback of resolutions of a board meeting;
- (8) other matters deemed necessary by the shareholders' general meeting.

The Rules and Procedures for the Board of Directors' Meetings is an integral part of and shall have the same legal effect as these Articles of Association and its appendices.

**Article 97** The board of directors shall consist of eleven (11) to fifteen (15) directors and there shall be one (1) Chairman and 1 to 2 Vice-chairman.

Directors can also act as senior management personnel, however, the number of directors who also act as senior management personnel shall not exceed on half of the total number of directors.

**Article 98** Directors of the Company shall be natural persons and they are not required to hold any shares in the Company.

Directors shall be elected at the shareholders' general meeting and each Board has a term of three (3) years. The term of office of a director shall be calculated from the date of their assumption of office until the expiry of the term of the present session of the board of directors. At the expiry of the term of office of a director, the term is renewable upon reelection. The term of office of any independent director may not be renewed for more than 6 years.

Newly appointed directors, supervisors should assume their office immediately after the close of the relevant general meeting, or on the date specified in the resolution of the general meetings.

Where the directors fail in timely re-election, the original directors shall, prior to the assumption of the reelected directors, performs its director duties in accordance with laws, administrative rules, regulations and the provisions of the Articles of Association and its appendices.

Article 99 The list of candidates for directors shall be submitted to the shareholders' general meeting in the form of motion for approval. The Board of Directors should inform the shareholders of the resume and basic profiles of the director candidates by way of announcement.

Candidates other than those for independent directors shall be nominated by the board of directors, the supervisory committee or shareholders who individually or jointly hold 3% or more of the Company's voting shares and be elected by the shareholders in a general meeting.

Candidates for independent directors of the Company shall be nominated by the Company's board of directors, the supervisory committee or shareholders who individually or jointly hold 1% or more of the Company's voting shares and be elected by the shareholders in a general meeting.

**Article 100** Independent directors shall be elected in the following manner:

- the nominator of a candidate for independent director shall seek the consent of the nominee, find out the occupation, academic qualification, rank and detailed working experience including all part-time jobs of the nominee and provide written proofs of the same to the Company before making the nomination. The candidate shall give a written undertaking to the Company agreeing to be nominated, undertaking the truthfulness and completeness of his particulars disclosed and guaranteeing the performance of a director's duties after being elected.
- (2) the nominator of an independent director shall give opinion on the qualification and independence of the nominee to act as an independent director. The nominee shall make an open announcement as to the absence of any relation between the Company and him which would affect his independent and objective judgment.
- (3) if the nomination of candidates for independent directors is made before the Company's convening of a board meeting, the written proofs of the nominee referred to in sub-paragraphs (1) and (2) above shall be disclosed together with the board resolution or the notice of shareholders' general meeting.
- (4) if the shareholders who individually or jointly hold 3% or more of the Company's total voting shares nominates in a general meeting of the Company according to law the independent directors' candidates, a written notice stating their intention to nominate a candidate for directors and the nominee's consent to be nominated together with the written proofs and undertaking of the nominee referred to in sub-paragraphs (1) and (2) above shall be delivered to the Company not less than ten (10) days before the general meeting, and the period granted by the Company for lodging the above notice and documents by the relevant nominator (such period shall commence from the date after the issue of the notice of the general meeting) shall not be less than ten (10) days

(5) when issuing notice of shareholders' general meeting where independent directors are to be elected, the Company shall submit the relevant information of all nominees to the domestic stock exchange on which the Company's shares are listed. The written opinions of the board of directors shall also be submitted in case the Company's board has any dispute as to the particulars of the nominee. If the stock exchange on which the Company's shares are listed opposes to the nomination of any nominee, this nominee may not be included as a candidate for independent directors. In convening a general meeting to elect independent directors, the Company's board shall specify if the stock exchange on which the Company's shares are listed has any dispute as to the candidates for independent directors.

# **Article 101** Non-independent directors shall be elected in the following manner:

- (1) the nominator of a candidate for non-independent director shall seek the consent of the nominee, find out the occupation, academic qualification, rank and detailed working experience including all part-time jobs of the nominee and provide written proofs of the same to the Company before making the nomination. The candidate shall give a written undertaking to the Company agreeing to be nominated, undertaking the truthfulness and completeness of his particulars disclosed and guaranteeing the performance of a director's duties after being elected.
- (2) if the nomination of candidates for non-independent directors is made before the Company's convening of a board meeting, the written proofs of the nominee referred to in sub-paragraph (1) above shall be disclosed together with the board resolution or the notice of the shareholders' general meeting.
- (3) if the shareholders who individually or jointly hold 3% or more of the Company's voting shares or nominates in a general meeting of the Company according to law the independent directors' candidates, a written notice stating their intention to nominate a candidate for directors and the nominee's consent to be nominated together with the written proofs and undertaking of the nominee referred to in sub-paragraph (1) above shall be delivered to the Company not less than ten (10) days before the general meeting, and the period granted by the Company for lodging the above notice and documents by the relevant nominator (such period shall commence from the date after the issue of the notice of the general meeting) shall not be less than ten (10) days".

# Article 102 The following basic requirements shall be met in order to be an independent director:

- (1) qualified to be a director of a listed company under the laws, administrative regulations and other relevant provisions;
- (2) has basic knowledge of the operation of a listed company, familiar with the relevant laws, administrative rules, regulations and rules from competent authorities;
- (3) has 5 years or more of legal or financial experience or other experience in performing the duties of an independent director;
- (4) independence and other requirements stipulated by laws, administrative rules, regulations of the competent authorities and the Articles of Association and its appendices .
- Article 103 When voting on the election of directors and supervisors in a shareholders' general meeting, cumulative voting system in accordance with the relevant laws and regulations in effect shall be adopted. In the event of inconsistency between the laws and regulations and the Articles of Association and its appendices, the Board of the Directors may decide to adopt an appropriate cumulative voting system subject to laws and decrees. Please refer to the Rules and Procedures for the Shareholders' General Meetings for details of implementation of the accumulative voting system.
- Article 104 Provided that the relevant laws and administrative rules are observed, a director whose term of office has not yet been expired may be removed in a general meeting by way of ordinary resolution (but the right to lodge a claim under a contract is not affected).

If a director has failed to attend a board meeting personally nor appoint a proxy to attend on his behalf on two consecutive occasions, it shall be treated as a failure to discharge his duties. The board of directors shall propose in a shareholders' general meeting to remove and replace this director.

If an independent director has failed to attend a board meeting personally on three consecutive occasions, the board of directors shall propose in a shareholders' general meeting to remove and replace this director. Unless in the above circumstances and in circumstances as provided in the Company Law where a person is prohibited from acting as a director, no independent director may be removed before his term of office expires. In case of early removal, the Company shall disclose it by way of special disclosure. If the removed independent director considers that he is removed by the Company improperly, he may make an open declaration.

- **Article 105** A director may resign before his term of office expires. In resigning his duties, a director shall tender a resignation to the board in writing and the board of directors shall disclose the relevant information within two days.
- **Article 106** If the resignation of a director causes the board members of the Company to fall below the minimum number of members to form a quorum, prior to the assumption of the re-elected directors, the former directors shall perform their directorship pursuant to laws, administrative rules, regulations and the Articles of Association and its appendices.

If the resignation of an independent director causes the proportion of independent directors in the board of the Company to fall below the minimum requirements of the relevant regulatory authorities, the resignation of this independent director shall be effective only after the succeeding independent director has filled his vacancy.

Notwithstanding the foregoing, the resignation of the directors shall take effect upon receipt of the resignation notification by the Board of Directors.

**Article 107** The board of directors shall exercise the following functions and powers:

- (1) to be responsible for the convening of the shareholders' general meeting and to report on its work to the shareholders in general meetings;
- (2) to implement the resolutions passed by the shareholders in general meetings;
- (3) to determine the Company's business plans and investment proposals;
- (4) to formulate the Company's annual preliminary and final financial budgets;
- (5) to formulate the Company's profit distribution proposal and loss recovery proposal;
- (6) to formulate proposals for the credit and financial policies of the Company, the increase or reduction of the Company's registered capital and for the issue of any kind of securities of the Company's (including but without limitation to the Company's debentures) and proposals for listing and repurchase of the Company's shares;
- (7) to set forth plans for significant acquisition or disposal proposals, the merger, division, change of corporate form or dissolution of the Company;
- (8) to determine the risks investments of the Company in relation to, external investment, purchase or sale of assets, pledge, entrusting financing, connected transaction;
- (9) to examine external guarantees of the Company in accordance with laws and the provisions of the Articles of Association and its appendices;

- (10) to decide on the Company's internal management structure;
- (11) to appoint or remove the Company's president and to appoint or remove senior vice-president, the vice-president and Chief Financial Officer of the Company according to the recommendations of the president; to appoint or remove the secretary of the board of directors and to decide on their remuneration;
- to appoint or replace the members of the board of directors and the supervisory committee of its wholly-owned subsidiary, appoint, replace or recommend the shareholders' proxies, directors (candidates) and supervisors (candidates) of its subsidiary(ies) which are controlled or invested by the Company.
- (13) to determine the establishment of Company's branch offices;
- (14) to formulate proposals for any amendment of the Articles of Association and its appendices and its appendices;
- (15) to set forth the Company's basic management system;
- (16) to manage the disclosure of information of the Company;
- (17) to propose in a shareholders' general meeting to engage or replace the accounting firm which undertakes auditing work of the Company;
- (18) to listen to the president's work report and check the president's work;
- (19) to determine important matters and administrative matters of the Company other than those which should be determined by resolution of a shareholders' general meeting of the Company except for the matters as specified by law, administrative rules, regulations of the competent department(s) and these Articles of Association and its appendices, and to sign other important agreements;
- (20) to exercise any other powers stipulated by laws, administrative rules, regulations of the competent department (s) or the Articles of Association and its appendices and conferred by the shareholders in a general meeting.

Other than the board of directors' resolutions in respect of the matters specified in sub-paragraphs (6), (7) and (14) of this Article which shall be passed by the affirmative vote of more than two-thirds of all the directors, the board of directors' resolutions in respect of all other matters may be passed by the affirmative vote of over half of the directors ((9) should be approved by more than two-thirds of the directors attending the meeting.)

- Article 108 The above functions and powers of board meetings may be authorized to one or more directors upon the agreement of all directors, but matters concerning material interests of the Company shall be determined by the board collectively. The authorization of the board shall be clear and specific.
- Article 109 An independent director shall have the following special functions and powers in addition to those conferred by the Company Law, other relevant laws, administrative rules and the Articles of Association and its appendices:
  - (1) material connected transactions (determined according to the standards issued from time to time by the relevant regulatory authorities in the place where the Company's shares are listed) which should be approved by the board of directors or the shareholders' general meeting according to law shall, upon the recognition of independent directors, be submitted to the board of directors for discussion. Any resolution made by the board of directors regarding the Company's connected transactions must only be effective after it has been signed by the independent directors. The independent directors may, before making a judgment, engage an intermediary to issue an independent financial report for them to rely upon in making the judgment;
  - (2) to propose to the board of directors to engage or remove an accounting firm;

- (3) two or more than one-half of the independent directors may propose to the board of directors to convene an EGM;
- (4) to propose the calling of a board meeting;
- (5) to engage an external auditing or advisory organ independently;
- (6) to collect voting rights from shareholders prior to the convening of a shareholders' general meeting;
- (7) to report directly to the shareholders' general meetings, securities regulatory organ under the State Council and other relevant departments.

The independent directors shall seek the consent of more than half of the independent directors in exercising their functions and powers other than sub-paragraphs (1) and (3) above.

If the above proposal is not accepted or the above functions and powers are not exercised properly, the Company shall disclose the same.

- Article 110 When making decisions on significant matters such as direction of reform and development, key objectives, and priority operational arrangements of the Company, the board of directors should seek advice from the Party organization. When the board of directors appoints the management personnel of the Company, the Party organization shall consider and provide comments on the candidates for management positions nominated by the board of directors or the president, or recommend candidates to the board of directors and/or the president.
- Article 111 In respect of approval authority of the board of directors in relation to external investment, purchase or sale of assets, pledge, external guarantee, entrusting financing, connected transaction, the Rules and Procedures for the Board of Directors' Meetings shall provide with clear rules, the board of directors shall lay down strict procedures to inspect and decide on risks investments in respect of the aforesaid matters. For major investment projects in excess of the approval limit of the board of directors, it shall organize the relevant experts and professional officers to conduct assessment for approval of the shareholders in a general meeting.
- Article 112 The Chairman and the Vice-Chairman shall be directors of the Company and be appointed and removed by affirmative vote of a simple majority of all directors. The term of office of the Chairman or the Vice-Chairman shall be three (3) years which term is renewable upon re-election.
- Article 113 The Chairman of the board of directors shall exercise the following functions and powers:
  - 1) to preside over shareholders' general meetings and to convene and preside over meetings of the board of directors;
  - (2) to co-ordinate and perform the responsibilities of the board of directors and review on the implementation of resolutions passed by the board of directors at directors' meetings;
  - (3) to sign the certificates of shares, debentures and other valuable securities issued by the Company;
  - (4) to sign important documents of the board and other documents which should be signed by the Company's legal representative;
  - (5) to exercise the functions and powers of a legal representative;
  - (6) where it is lawful and in the interest of the Company, to exercise the special right to deal with the Company's affairs during emergency such as the occurrence of natural disasters, and to report to the Company's board of directors and general meetings thereafter;
  - (7) to exercise other powers conferred by the board of directors.

The vice-chairman of the board of directors shall assist the chairman of the board with its work. Whenever the Chairman is unable to or fails to exercise his/her powers, the vice-chairman of the board shall perform the duties (if the Company has two or more vice chairman of the board, the vice-chairman voted by more than one half of the directors shall perform the duties); where the vice-chairman of the board is unable to or fails to fulfill his/'her duty, a director shall be elected by half of the total members of the board of directors to perform the duties.

**Article 114** Board meetings shall be convened regularly at least 4 times a year. An EGM shall be called for on occurrence of any of the events set out in the Rules and Procedures for the Board of Directors' Meetings.

The calling for a board meeting, and the contents and form of a notice of meeting shall comply with the requirements of the Rules and Procedures for the Board of Directors' Meetings.

- **Article 115** Meetings of the board of directors shall be held only if more than half of all the directors (including any alternate director appointed) are present. Each director shall have one (1) vote. Where there is an equality of votes cast both for and against a resolution, the Chairman of the board of directors shall have an additional vote.
- Article 116 Directors shall attend the meetings of the board of directors in person. Where a director is unable to attend a meeting for any reason, he may by a written power of attorney appoint another director to attend the meeting on his behalf. The power of attorney shall set out the name of the proxy, the subject and scope of authorization and validity of the time limit of the proxy, which shall be signed or officially sealed by the authorizing party.

A director appointed as a representative of another director to attend the meeting shall exercise the rights of a director within the scope of authority conferred by the appointing director. Where a director is unable to attend a meeting of the board of directors and has not appointed a representative to attend the meeting on his behalf, he shall be deemed to have waived his right to vote at the meeting.

All expenses incurred by the directors for attending the board meeting shall be borne by the Company, including the traffic expense from the place where the director is located to the place where the meeting is convened, as well as the board and lodging expenses during the term of meeting. The miscellaneous expenses such as the rental of meeting room and the local traffic expenses etc. shall also be borne by the Company.

- Article 117 Apart from meetings on site, interim meetings of the board of directors may take the form of video-teleconference, written communications over the resolutions, or any other methods, provided that directors are ensured to fully express their opinions. In any event, such meetings are in compliance with the Rules and Procedures for the Board of Directors' Meetings.
- Article 118 Matters determined in a board meeting shall be recorded in Chinese in the form of Records of Meeting. The contents and form of Records of Board Meetings shall comply with the Rules and Procedures for the Board of Directors' Meetings.
- Article 119 Directors shall be liable for board resolutions. If a board resolution is against the law, administrative rules or the Articles of Association and its appendices and resolutions of the shareholders' general meetings, thus causes the Company to suffer any loss, the directors who participate in voting shall assume the liability to compensate to the Company); directors who are proved to have cast a dissenting vote against the motion during the voting as recorded in the records of meeting shall be exempted from liability.

## CHAPTER 11 SECRETARY OF THE BOARD OF DIRECTORS

Article 120 The Company shall have one (1) secretary of the board of directors, being a senior management personnel, shall be accountable to the Company and the board of directors. The Company shall set forth regulations in relation to the work of the Secretary of the Board to promote the management of the Company and make provisions for disclosure of information and investor relations.

The board of directors may establish its secretarial department when necessary.

**Article 121** A director or a member of the senior management personnel of the Company may concurrently act as the secretary of the Company's board of directors. No accountant of the accounting firm engaged by the Company may concurrently act as the secretary of the Company's board of directors.

The secretary of the Company's board of directors shall be a natural person who has the requisite professional knowledge and experience, and shall be nominated by the Chairman of the Board and appointed by the board of directors. In the case of a director acting concurrently as the secretary of the board, if an act has to be performed by a director and the secretary of the board respectively, this director acting concurrently as the secretary of the board may not act in both identities.

- **Article 122** The main duties and responsibilities of the secretary of the board of directors include:
  - (1) to assist directors to deal with the daily matters of the board of directors, continuously provide, remind and ensure directors and the president, etc. to be well informed of the laws, regulations, policies and requirements of both domestic and overseas regulatory organizations concerning the operation of the Company, and assist directors and the president to practically implement the domestic and foreign laws, regulations, the Articles of Association and its appendices and other regulations when performing their duties and powers
  - (2) to be responsible for the organization and preparation of the documents of the board of directors and shareholders' general meeting, well prepare the meeting record work, ensure the meeting policies in conformity with the legal procedures, and to keep abreast of the execution of the resolutions of the board of directors;
  - (3) to be responsible for the organization and coordination of information disclosure, to ensure of a timely, accurate, lawful, true and complete disclosure of information, coordination of the relationship with the investors, and enhancement of the transparency of the Company;
  - (4) to participate in and organize the financing in capital market;
  - (5) to deal with the relationships with the intermediary organs, regulatory authorities and the Media.
- **Article 123** The secretary of the board of directors shall discharge his duties diligently according to laws, administrative rules, regulations of the competent authorities and the Articles of Association and its appendices.

The secretary of the board of directors shall assist the Company to comply with the relevant PRC law and regulations of the securities regulatory organ of the place where the Company's shares are listed.

#### CHAPTER 12 PRESIDENT

**Article 124** The Company shall have a president who is accountable to the board of directors. The president shall be nominated by the Chairman of the board of directors and appointed or removed by the board of directors.

The Company shall have a senior vice president, several vice-presidents, and one Chief Financial Officer who shall assist the president in work. The senior vice president, Chief Financial Officer and the vice-presidents shall be nominated by the president and appointed or removed by the board of directors.

- **Article 125** The president shall exercise the following duties and powers:
  - (1) to be in charge of the Company's production, operation and management, to co-ordinate the implementation of the resolutions of the board of directors and to report his work to the board of directors;

- (2) to organize the implementation of the Company's annual business plan and investment proposal;
- (3) to draft plans for the establishment of the Company's internal management structure;
- (4) to draft plans for the establishment of the branch company of the Company;
- (5) to draft the Company's basic management system;
- (6) to formulate specific rules and regulations for the Company;
- (7) to propose the appointment or dismissal of the Company's senior vice president, vice-president(s) and Chief Financial Officer;
- (8) to appoint or dismiss management personnel other than those required to be appointed or dismissed by the board of directors;
- (9) to determine the wages, fringe benefits, rewards and punishments of the Company's staff, to determine the appointment and dismissal of the Company's staff;
- (10) to propose the convening of extraordinary meetings of directors;
- (11) other powers conferred by the Articles of Association and its appendices and the board of directors.
- **Article 126** The president and other senior officers who are not directors, have the right to attend board meetings and to receive notices of meetings and other relevant documents, but do not have any voting rights at board meetings.
- **Article 127** The president shall set forth "Work Regulations for the President" for implementation upon the approval of the board of directors
- **Article 128** The Work Regulations for the President shall include:
  - (1) requirements and procedures for the convening of a presidents' meeting and the officers attending;
  - (2) the president, senior vice-presidents, Chief Financial Officer and vice presidents shall divide their duties among themselves and perform their own duties;
  - (3) use of the Company's funds and assets, authority to sign major contracts and the system to report to the board of directors and to the supervisory committee at the request of the supervisory committee;
  - (4) other matters as the board of directors may consider necessary.
- Article 129 In performing their functions and powers, the president, senior vice-presidents, the Chief Financial Officer and vice presidents shall act honestly and diligently and in accordance with laws, administrative regulations and the Articles of Association and its appendices. They may not alter the resolutions of a shareholders' general meeting or of a board meeting nor act ultra vires.

# **CHAPTER 13 SUPERVISORY COMMITTEE**

Article 130 The Company shall have a supervisory committee which is accountable to the shareholders' general meetings.

The Company shall set forth "Rules and Procedures for the Supervisors' Meetings" for implementation upon being approved by the shareholders in a general meeting. The Rules and Procedures for the Supervisors' Meetings shall include the followings:

- (1) the formation and business system of the supervisory committee;
- (2) the functions and powers of the supervisory committee;
- (3) the system of discussion of the supervisors' meetings;
- (4) the procedures of discussion of the supervisory committee;
- (5) the disclosure of information of the supervisors' meetings;
- (6) implementation and feedback of resolutions of the supervisory committee;
- (7) other matters as the shareholders' general meetings may consider necessary.

The Rules and Procedures for the Supervisors' Meetings shall be an integral part of and have the same legal effect as these Articles of Association and its appendices.

Article 131 The supervisory committee shall compose of 7-9 supervisors. Of which, supervisors assumed by representatives of workers and staff of the Company shall not be less than 1/3. The supervisors assumed by non-representatives of the employees shall be elected and dismissed through the employee representatives meetings, employee meetings or through other forms of democratic election.

Each supervisor shall serve for a term of 3 years, which term is renewable upon re-election and re-appointment. The supervisor's term shall be calculated from the date of appointment to the expiration of the term of the relevant session of the supervisory committee. Where the supervisor fails to be re-elected upon the expiration of its term, the former supervisor shall, prior to the assumption of the reelected supervisor, perform the duty hereof in accordance with laws, administrative rules, regulations and the provisions in the Articles of Association and its appendices.

Article 132 The supervisory committee shall have one (1) Chairman, and may have a deputy Chairman, both of whom shall be supervisors. The election or removal of the Chairman and deputy Chairman of the supervisory committee shall be determined by two-thirds or more of the members of the supervisory committee.

The Chairman of the supervisory committee shall exercise the duties and powers of the supervisory committee.

The Chairman of the supervisory committee shall convene and preside over the meetings. In the event that the Chairman is unable to or fails to perform such duties, the deputy Chairman of the supervisory committee shall convene and preside over such meetings; if the deputy Chairman is unable to or fails to perform such duties, over half of the supervisors shall jointly recommend a supervisor, who shall convene and preside over the meetings.

- **Article 133** If necessary, the supervisory committee may establish its offices responsible for daily affairs of the supervisory committee.
- Article 134 A director and senior management personnel may not act concurrently as a supervisor.
- Article 135 The list of supervisors assumed by the non-representatives of the employees shall be submitted to the shareholders' general meeting in the form of motion for approval. The board of directors shall announce the resume and basic profile of the candidate supervisors to the shareholders.

The candidates for supervisors who are shareholder representatives shall be nominated by the Company's board of directors, the supervisory committee or shareholders who individually or jointly hold 3% or more of the Company's voting shares and be elected by the shareholders in a general meeting.

The candidates for independent supervisors shall be nominated by the Company's board of directors, the supervisory committee or shareholders who individually or jointly hold 1% or more of the Company's voting shares and be elected by the shareholders in a general meeting.

- **Article 136** The supervisors who are shareholders representatives and independent supervisors shall be elected in the following manner:
  - (1) the nominator of a candidate for supervisor who is a shareholder representative or an independent supervisor shall seek the consent of the nominee, find out the occupation, academic qualification, rank and detailed working experience including all part-time jobs of the nominee and provide written proofs of the same to the Company before making the nomination. The candidate shall give a written undertaking to the Company agreeing to be nominated, undertaking the truthfulness and completeness of his particulars disclosed and guaranteeing the performance of a director's duties after being elected.
  - (2) If the nomination of a candidate for supervisor who is a shareholder representative or an independent supervisor is made before the Company's convening of a board meeting, the written proofs of the nominee referred to in subparagraphs (1) above shall be disclosed together with the board resolution or the notice of the shareholders' general meeting.
  - (3) If the shareholders who have the rights to nominate nominates in a shareholders' meeting of the Company a candidate for a supervisor who is a shareholder representative or a candidate for an independent supervisor, a written notice stating their intention to nominate a candidate for a supervisor and the nominee's consent to be nominated together with the written proofs and undertaking of the nominee referred to in sub-paragraph (1) above shall be delivered to the Company ten (10) days before the AGM.
- **Article 137** A supervisor may resign before his term expires, and shall submit a written resignation report to the supervisor committee.

Where the resignation of supervisors within his (her) term has resulted in the number of the total member in supervisory committee is lower than the quorum, the former supervisor shall, prior to the assumption of the reelected supervisor, perform the duty hereof in accordance with laws, administrative rules, regulations and the provisions in the Articles of Association and its appendices . Apart from the aforesaid situation, the resignation of the supervisors shall be effective upon the receipt of the written resignation report by the supervisory committee.

**Article 138** Supervisors' meetings shall be convened regularly at least 4 times a year. An extraordinary supervisors' meeting shall be convened on occurrence of any of the events specified in the Rules and Procedures for the Supervisors' Meetings. The meetings shall be called upon by the Chairman of the supervisory committee.

A 10 days' prior notice shall be given to all supervisors for the convening of a supervisors' meeting. The convening of a supervisors' meeting and the contents and form of the notice of meeting shall comply with the Rules and Procedures for the Supervisors' Meetings.

- **Article 139** The supervisory committee shall exercise the following functions and powers in accordance with law:
  - (1) to review the Company's financial position; to appoint another accounting firm in the name of the Company to review the Company's financial condition independently;
  - (2) to supervise the directors, senior management personnel to ensure that they do not act in contravention of any law, regulation or the Articles of Association and its appendices, and to advise on dismissal of directors or senior management personnel who are in breach of laws, administrative rules, the Articles of Association and its appendices or resolutions of the shareholders' general meetings;
  - (3) to demand the directors or the senior management personnel to rectify their error if they have acted in a harmful manner to the Company's interest;

- (4) to check and inspect the financial information such as the financial report, business report and plans for distribution of profits to be submitted by the board of directors to the shareholders' general meetings and to authorize, in the Company's name, publicly certified and practicing accountants to assist in the review on such information should any doubt arise in respect thereof, examine and opine in writing on the periodical reports of the Company prepared by the board of directors;
- (5) to make recommendations of accounting firms for engagement by the Company;
- (6) to make motions in a shareholders' general meeting;
- (7) to propose to convene an EGM, where the board of directors fails to perform the duties in relation to convene or preside a shareholders' general meeting as required by the Company Laws, to convene and preside the shareholders' general meeting;
- (8) to propose to convene an extraordinary board meeting;
- (9) to represent the Company in negotiations with or in bringing actions against a director or a senior management personnel:
- (10) to investigate into any abnormalities in operation of the Company; if necessary, to engage accounting firms, law firms and other professional institutions to assist its work, and the expenses shall be borne by the Company;
- (11) other duties and powers as may be specified by the Articles of Association and its appendices .

Supervisors shall attend meetings of the board of directors, and may enquire or advise on matters in the resolutions of the board of directors.

- Article 140 The supervisory committee may require the directors, senior management personnel, internal and external auditors to attend supervisors' meetings and answer any question that the supervisory committee may have regarding matter it cares about
- **Article 141** Resolutions of the supervisory committee shall be passed by the affirmative vote of more than two-thirds of all of its members.
- Article 142 Records shall be made for all supervisors' meetings and be signed by all attending supervisors and the recording person. Supervisors shall have the right to ask for the making of a descriptive record of what he speaks in the meeting. Records of supervisors' meetings shall be treated as the Company's files and kept in the business system of the supervisory committee for at least 10 years.
- **Article 143** All reasonable fees incurred in respect of the employment of professionals (such as, lawyers, certified public accountants or practicing auditors) which are required by the supervisory committee in the exercise of its functions and powers shall be borne by the Company.
- **Article 144** A supervisor shall carry out his duties faithfully and bona fide in accordance with laws, administrative regulations and the Articles of Association and its appendices.

# CHAPTER 14 QUALIFICATIONS AND OBLIGATIONS OF THE DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT PERSONNEL OF THE COMPANY

- **Article 145** A person may not serve as a director and a senior management personnel of the Company if any of the following circumstances apply:
  - (1) a person who does not have or who has limited capacity for civil conduct;

- (2) a person who has been found guilty of for corruption, bribery, infringement of property or misappropriation of property or other crimes which destroy the social economic order, and the sentence is enforced for less than five (5) years or a person who has been deprived of his political rights and not more than five (5) years have lapsed since the sentence was served;
- (3) a person who is a former director, factory manager or president of a company or enterprise which has been dissolved or put into liquidation as a result of mismanagement and who was personally liable for the winding up of such company or enterprise, where less than three (3) years have elapsed since the date of completion of the insolvent liquidation of the company or enterprise;
- (4) a person who is a former legal representative of a company or enterprise the business licence of which was revoked due to violation of law and who are personally liable therefor, where less than three (3) years have elapsed since the date of the cancellation of the business licence;
- (5) a person who has a relatively large amount of debts which have become due and outstanding;
- (6) a person who is currently under investigation by the judicial authorities for violation of criminal law;
- (7) a person who, according to laws and administrative regulations, or regulations of the competent authorities cannot act as a leader of an enterprise;
- (8) a person other than a natural person;
- (9) a person who has been adjudged by the competent authority for violation of relevant securities regulations and such conviction involves a finding that such person has acted fraudulently or dishonestly, where not more than five (5) years have lapsed from the date of such conviction;
- (10) a person who has been prohibited by the securities regulatory authority of the State Council to participate in market activities and the prohibition has still not been uplifted.
- (11) other circumstances which are applicable according to laws and administrative regulations, or regulations of the competent authorities.

The election of directors, supervisors or the engagement of senior management personnel in contravention to the provisions under this Article shall be null and void. Upon any contravention of (1) of this Article above by the directors, supervisors or senior management personnel during their term of office, the Company shall remove them from their position.

**Article 146** The chairman, vice-chairman and directors of the Company's controlling shareholder acting concurrently as the chairman, vice-chairman or director of the Company may not exceed 2 in number.

Personnel as acting on positions other than directors in the Company's controlling shareholders or actual controllers shall not act as senior management personnel of the Company.

**Article 147** The following people may not act as an independent director of the Company:

- (1) persons employed by the Company or its subsidiaries and their immediate family members and major social connections (immediate family members shall mean spouse, parents and issues, etc. and major social connections shall mean siblings, parents-in-law, sons/daughters-in-law, spouse of siblings, siblings of spouse, etc.);
- (2) natural person shareholders who directly or indirectly hold 1% or more of the Company's issued shares or who are top 10 shareholders and their immediate family members;
- (3) persons employed by the shareholder company which directly or indirectly holds 5% or more of the Company's issued shares or by the top five shareholder companies of the Company and their immediate family members;

- (4) persons who once belonged to categories (1) to (3) above in the past 3 years;
- (5) persons who provide financial or legal advice to the Company or its subsidiaries;
- (6) any independent director who is already the director of five listed companies;
- (7) other persons determined by the securities regulatory authority of the State Counsel.
- **Article 148** The validity of an act carried out by a director, a supervisor, a senior management personnel of the Company on its behalf shall, as against a bona fide third party, not be affected by any irregularity in his office, election or any defect in his qualification.
- Article 149 Without the lawful authorization of the Articles of Association and its appendices or the board of directors, a director of the Company may not act personally on behalf of the Company or the board of directors. If he acts personally, he shall declare his own position and identity in advance where the acting would cause a third party to believe reasonably that he is acting on behalf of the Company or the board of directors.
- **Article 150** In addition to the obligations imposed by laws, administrative regulations or the listing rules of the stock exchange on which shares of the Company are listed, each of the Company's directors, supervisors, president, and senior management personnel owes a duty to each shareholder, in the exercise of the duties and powers of the Company entrusted to him:
  - (1) not to procure the Company to do anything ultra vires to the scope of business as stipulated in its business licence;
  - (2) to act honestly and in the best interests of the Company;
  - (3) not to expropriate the Company's property in any way, including (without limitation to) usurpation of opportunities which may benefit the Company;
  - (4) not to deprive of the individual interest of shareholders, including (without limitation to) rights to distribution and voting rights, save and except pursuant to a restructuring of the Company which has been submitted to the shareholders in general meeting for approval in accordance with the Articles of Association and its appendices.
- **Article 151** Each of the Company's directors, supervisors, and senior management personnel owes a duty, in the exercise of his powers and in the discharge of his duties, to exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances.
- **Article 152** The directors shall abide by laws, administrative rules and the Articles of Association and its appendices, bearing the following obligations to the Company:
  - (1) in line with the national laws, administrative rules as well as the various requirements of the national economic policies, exercise meticulously, gravely and assiduously the rights authorized by the Company so as to ensure the Company's business act within the scope prescribed in the business licence;
  - (2) give fair treatment to all the shareholders;
  - (3) investigate the performance of the Company;
  - (4) report regularly to the Company and signing confirmation opinion in writing to ensure the sincerity, preciseness and integrity of the information revealed by the Company;
  - (5) provide genuinely the relevant information and material to the supervisory committee, and not impede the supervisory committee to exercise its functional and powers;

(6) other obligations prescribed in relevant laws, administrative rules, regulations and Articles of Association and its appendices.

The obligations as stated in aforesaid (4) to (6) shall also be applicable to senior management personnel.

- Article 153 Each of the Company's directors, supervisors, and senior management personnel shall exercise his powers or perform his duties in accordance with the fiduciary principle, and shall not put himself in a position where his duty and his interest may conflict. This principle includes (without limitation to) discharging of the following obligations:
  - (1) to act bona fide in the best interests of the Company;
  - (2) to act within the scope of his powers and not to exceed such powers;
  - (3) to exercise the discretion vested in him personally and not to allow himself to act under the control of another and, unless and to the extent permitted by laws, administrative regulations or with the informed consent of shareholders given in a general meeting, not to transfer the exercise of his discretion;
  - (4) to treat shareholders of the same class equally and to treat shareholders of different classes fairly;
  - (5) unless otherwise provided for in the Articles of Association and its appendices or except with the informed consent of the shareholders given in a general meeting, not to enter into any contract, transaction or arrangement with the Company;
  - (6) not to use the Company's property for his own benefit, without the informed consent of the shareholders given in a general meeting;
  - (7) not to abuse his position to accept bribes or other illegal income or expropriate the Company's property in any way, including (without limitation to) opportunities which benefit the Company;
  - (8) not to accept commissions in connection with the Company's transactions, without the informed consent of the shareholders given in a general meeting;
  - (9) to comply with the Articles of Association and its appendices, to perform his official duties faithfully, to protect the Company's interests and not to exploit his position and power in the Company to advance his own interests;
  - (10) not to compete with the Company in any way, save with the informed consent of the shareholders given in a general meeting;
  - (11) not to misappropriate the Company's funds or to lend such funds to any other person, not to use the Company's assets to set up deposit accounts in his own name or in the any other name or to use such assets to guarantee the debts of a shareholder of the Company or any other personal liabilities;
  - (12) not to divulge any confidential information which he has obtained during his term of office, without the informed consent of the shareholders in a general meeting; nor shall he use such information otherwise than for the Company's benefit, unless disclosure of such information to the court or other governmental authorities is made in the following circumstances:
    - 1. disclosure is required by law;
    - 2. public interests so warrants;
    - 3. the interests of the relevant director, supervisor, or senior management personnel so requires.

- **Article 154** Each director, supervisor, senior management personnel of the Company shall not direct the following persons or institutions ("associates") to act in a manner which a director, supervisor or senior management personnel is prohibited from so acting:
  - (1) the spouse or minor children of the director, supervisor, or senior management personnel of the Company;
  - (2) the trustee of the director, supervisor, senior management personnel or of any trustee described in sub-paragraph (1) above;
  - partners of directors, supervisors, senior management personnel or any person referred to in sub-paragraphs (1) and (2) of this Article;
  - (4) a company in which a director, supervisor, senior management personnel, whether alone or jointly with one (1) or more of the persons referred to in sub-paragraphs (1), (2) and (3) of this Article and other directors, supervisors, senior management personnel, has de facto controlling interest;
  - (5) the directors, supervisors and senior management of a company which is being controlled in the manner set out in sub-paragraph (4) above, including but without limitation to directors, supervisors and president.
- Article 155 The directors, supervisors and senior management personnel of the Company, during their tenure, shall periodically report to the Company of the status on their holding of the Company's shares and any changes thereof; during their tenure the total number of shares transferred on an annual basis shall not exceed 25% of the total number of the shares of the Company held by them; the above personnel shall not transfer their shares of the Company they hold within one year from the listing of the relevant Company's shares. The aforesaid personnel shall not transfer the Company's shares held by them within six months after they leave their positions in the Company. The aforesaid shall not apply to the change in shareholding due to judicial enforcement, heritage, gift and distribution of estate by operation of laws.

The directors, supervisors and senior management personnel, who hold less than 1,000 shares of the Company, may transfer their shares once in all, but not subject to the aforesaid percentage restrictions.

- Article 156 The duty of a director, supervisor, and the senior management personnel to act in good faith does not necessarily terminate on the expiration of their term of office. His duty of confidentiality in respect of trade secrets of the Company survives the termination of his tenure until the same has become open information. Other duties may continue for such period as the principle of fairness may require depending on the length of time which has lapsed between the termination and the act concerned and on the circumstances and the terms under which the relationship between the relevant director, supervisor, manager and the senior officer on one hand and the Company on the other hand was terminated.
- **Article 157** A director, supervisor, and a senior management personnel of the Company may be relieved of liability for specific breaches of his duty with the informed consent of the shareholders given at a general meeting, save under the circumstances of Article 53 hereof.
- Article 158 Where a director, supervisor, senior management personnel of the Company is in any way, directly or indirectly, materially interested in a contract, transaction or arrangement or proposed contract, transaction or arrangement with the Company, (other than his contract of service with the Company), he shall declare the nature and extent of his interests to the board of directors at the earliest opportunity, whether or not the contract, transaction or arrangement or proposal therefor is otherwise subject to the approval of the board of directors.

If a director or his associate (as defined in the Rules Governing the Listing of Securities of the Hong Kong Stock Exchange Limited) have a material interest in any contract, transaction, arrangement or other matters that requires the approval of the board of directors, the relevant director shall not vote for the relevant matter at the meeting of the board of directors, and shall not be listed in the quorum of the meeting.

Unless the interested director, supervisor, senior management personnel discloses his interests in accordance with the preceding sub-paragraph of this Article and the contract, transaction or arrangement is approved by the board of directors at a meeting in which the director, supervisor, or senior management personnel is not counted as part of the quorum and refrains from voting, or from entering into a contract, transaction or arrangement in which that senior officer is materially interested is voidable at the instance of the Company except as against a bona fide party thereto who does not have notice of the breach of duty by the interested senior officer.

For the purposes of this Article, a director, supervisor, or senior management personnel of the Company is deemed to be interested in a contract, transaction or arrangement in which his associate is interested.

- Article 159 Where a director, supervisor, senior management personnel of the Company gives to the board of directors a notice in writing stating that, by reason of the facts specified in the notice, he is interested in contracts, transactions or arrangements which may subsequently be made by the Company, that notice shall be deemed for the purposes of the preceding Article to be a sufficient disclosure of his interests, so far as the content stated in such notice is concerned, provided that such notice shall have been given before the date on which the question of entering into the relevant contract, transaction or arrangement is first taken into consideration by the Company.
- **Article 160** The Company shall not pay taxes for or on behalf of a director, supervisor, senior management personnel in any manner.
- **Article 161** The Company shall not directly or indirectly make a loan to or provide any guarantee in connection with the making of a loan to a director, supervisor, senior management personnel of the Company or its holding company or any of their respective associates.

The foregoing prohibition shall not apply to the following circumstances:

- (1) provision of a loan or guarantee for a loan by the Company to its subsidiary;
- (2) the provision by the Company of a loan or a guarantee in connection with the making of a loan or any other funds available to its directors, supervisors, senior management personnel to meet expenditure incurred or to be incurred by him for the purposes of the Company or for the purpose of enabling him to perform his duties properly, in accordance with the terms of a service contract approved by the shareholders in a general meeting;
- (3) if the ordinary course of business of the Company includes the lending of money or the giving of guarantees, the Company may make a loan to or provide a guarantee in connection with the making of a loan to a director, supervisor, senior management personnel or his associates in the ordinary course of its business on normal commercial terms.
- **Article 162** Any person who receives funds from a loan which has been made by the Company acting in breach of the preceding Article shall, irrespective of the terms of the loan, forthwith repay such funds.
- **Article 163** A guarantee for the repayment of a loan which has been provided by the Company acting in breach of Article 159 (1) shall not be enforceable against the Company, save in respect of the following circumstances:
  - (1) the guarantee was provided in connection with a loan which was made to an associate of a director, supervisor, and senior management personnel of the Company or the Company's holding company and the lender of such funds did not know of the relevant circumstances at the time of the making of the loan; or
  - (2) the collateral which has been provided by the Company has already been lawfully disposed of by the lender to a bona fide purchaser.
- **Article 164** For the purposes of the foregoing provisions of this Chapter, a "guarantee" includes an undertaking or property provided to secure the obligor's performance of his obligations.
- **Article 165** In addition to any rights and remedies provided by the laws and administrative regulations, where a director, supervisor, and senior management personnel of the Company breaches the duties which he owes to the Company, the Company has a right:

- (1) to demand such a director, supervisor, or a senior management personnel to compensate it for losses sustained by the Company as a result of such breach;
- (2) to rescind any contract or transaction which has been entered into between the Company and such a director, supervisor, senior management personnel or between the Company and a third party (where such third party knows or should have known that such a director, supervisor, senior management personnel representing the Company has breached his duties owed to the Company);
- (3) to demand such a director, supervisor, or senior management personnel to surrender the gains made as result of the breach of his obligations;
- (4) to recover any monies which should have been received by the Company and which were received by such a director, supervisor, or a senior management personnel instead, including (without limitation to) commissions; and
- (5) to demand repayment of interest earned or which may have been earned by a director, supervisor, or a senior management personnel on money that should have been paid to the Company.
- **Article 166** If a director, supervisor, or a senior management personnel has violated the law, administrative rules, regulations of the competent authorities or the Articles of Association and its appendices in discharging his duties thereby causing losses to the Company, he shall be liable for compensation.
- Article 167 The Company shall make written contract with a director or supervisor in relation to the rights and duties of the Company and the director/supervisor, emoluments and term of office of the director/supervisor, liability of the director/supervisor for breach of law, regulations and these Articles of Association and its appendices and compensation for early termination of the contract, etc. The emoluments shall be approved in advance by the shareholders in a general meeting. The aforesaid emoluments include:
  - (1) emoluments in respect of his service as director, supervisor, or senior management personnel of the Company;
  - (2) emoluments in respect of his acting as a director, supervisor or a senior management personnel of any subsidiary of the Company;
  - (3) emoluments in respect of the provision of other services in connection with the management of the affairs of the Company and any of its subsidiaries;
  - (4) payment by way of compensation for loss of office, or as consideration for or in connection with his retirement from office.

No proceedings may be brought by a director or supervisor against the Company for anything due to him in respect of the matters mentioned in this Article except pursuant to the preceding contract.

- Article 168 The contract concerning the emoluments between the Company and its directors or supervisors should provide that in the event that the Company is acquired, the Company's directors and supervisors shall, subject to the prior approval of shareholders in a general meeting, have the right to receive compensation or other payment in respect of his loss of office or retirement. For the purposes of this paragraph, the acquisition of the Company includes any of the following:
  - (1) an offer made by any person to the general body of shareholders;
  - (2) an offer made by any person with a view to the offeror becoming a "controlling shareholder" within the meaning of Article 54 hereof.

If the relevant director or supervisor does not comply with this Article, any sum so received by him shall belong to those persons who have sold their shares as a result of such offer. The expenses incurred in distributing such sum on a pro rata basis amongst such persons shall be borne by the relevant director or supervisor and shall not be paid out of such sum.

#### CHAPTER 15 FINANCIAL AND ACCOUNTING SYSTEMS, PROFIT DISTRIBUTION AND AUDITING

- **Article 169** The Company shall establish its financial and accounting systems in accordance with laws, administrative regulations and PRC enterprise accounting standards formulated by the finance regulatory department of the State Council.
- **Article 170** The accounting year of the Company shall adopt the calendar year, i.e. starting from the 1 January of every calendar year and to 31 December of every calendar year.

The Company shall adopt Renminbi as its denominated currency for booking and accounting purposes , the account books shall be recorded in Chinese.

At the end of each fiscal year, the Company shall prepare a financial report which shall be examined and verified in a manner prescribed by law.

- **Article 171** The board of directors of the Company shall place before the shareholders at every annual general meeting such financial reports which the relevant laws, administrative regulations and directives promulgated by competent regional and central governmental authorities require the Company to prepare. These reports shall be verified.
- **Article 172** The Company's financial reports shall be made available for shareholders' inspection at the Company twenty (20) days before the date of every shareholders' annual general meeting. Each shareholder shall be entitled to have a copy of the financial reports referred to in this Chapter.

The Company shall deliver or send to each shareholder of Overseas-Listed Foreign-Invested Shares by prepaid mail at the address registered in the register of shareholders the said reports not later than twenty-one (21) days prior to the date of every annual general meeting of the shareholders.

Subject to the laws, regulations and listing rules of the listing place, the aforesaid reports may be issued or provided by way of the methods provided in Article 219 of the Articles of Association and its appendices, but need not be issued or provided by the abovementioned ways.

- Article 173 The financial statements of the Company shall, in addition to being prepared in accordance with PRC enterprise accounting standards and regulations, be prepared in accordance with either international accounting standards, or that of the place outside the PRC where the Company's shares are listed. If there is any material difference between the financial statements prepared respectively in accordance with the two accounting standards, such difference shall be stated in the financial statements. In distributing its profits after tax, the lower of the two amounts shown in the financial statements shall be adopted.
- Article 174 Any interim results or financial information published or disclosed by the Company must also be prepared and presented in accordance with PRC enterprise accounting standards and regulations, and also in accordance with either international accounting standards or that of the place overseas where the Company's shares are listed.
- Article 175 The Company shall publish its financial reports 4 times in each fiscal year, that is, the quarterly report shall be submitted to branch of China Securities Supervisory Committee and stock exchanges and published within one month after the expiration of the first 3 months and first 9 months of each fiscal year; the biannual financial report shall be submitted to branch of China Securities Supervisory Committee and stock exchanges and published within 60 days after the expiration of the first 6 months of each fiscal year; and the annual financial report shall be published within one 120 days after the expiration of each fiscal year.

- **Article 176** The Company shall not keep accounts other than those required by law. Assets of the Company will not be deposited into any account opened in the name of an individual.
- Article 177 When allocating the after-tax profits of the current year, the Company shall allocate (10) ten percent of its profit to the statutory common reserve fund. In the event that the accumulated statutory common reserve fund of the Company has reached more than (50) fifty percent of the registered capital of the Company, no allocation is needed.

In the event that the statutory common reserve fund of the Company is insufficient to make up the losses of the Company on the previous year, before allocating the statutory common reserve fund in accordance with the stipulations of the previous paragraph, the Company shall first make up the losses by using the profits of the current year.

After allocating the statutory common reserve fund from the after-tax profits of the Company, the Company can allocate the arbitrary common reserve fund according to the resolution of shareholders' general meeting.

The profits distributable to the shareholders, upon the approval in the shareholders' general meeting,, shall be distributed in accordance with the proportion of shares held by the shareholders.

**Article 178** Before making-up the losses, allocating the common reserve funds, the Company shall not allocate the dividends or carry out other allocations by way of bonus, where distribution had been completed, the shareholders shall return the profits distributed in breach of the regulations to the Company.

The Company holding its own shares shall not participate in the profit allocation.

- **Article 179** Capital common reserve fund includes the following items:
  - (1) premium on shares issued at a premium price;
  - any other income designated for the capital common reserve fund by the regulations of the finance regulatory department of the State Council.
- **Article 180** The common reserve fund of the Company shall be applied for compensating the losses, expansion of production and operation, or converting the common reserve fund into the capital of the Company. However, the common reserve fund of the Company shall not be used to offset loss of the Company.

When the statutory common reserve fund is converted to capital nature, the balance of the statutory common reserve fund may not fall below 25% of the Company's registered capital prior to such conversions.

- **Article 181** (1)
- (1) The Company should place emphasis on delivering reasonable return on investments to the investors. The Company shall pay due attention to the opinions of minority shareholders through various channels when allocating its profits. The profits distribution policy of the Company shall be durative and stable, taking into account of the long-term interests of the Company, the overall interests of all shareholders and the Company's sustainable development.
  - (2) The Company may distribute dividends in the following forms: cash, shares or other forms provided by laws, administrative rules, regulations of competent authorities and regulatory provisions in the place where the Company's shares are listed. The Company shall give priority to the distribution of dividends in cash. The Company may make interim dividends distribution.
  - (3) The Company shall distribute cash dividends when the Company's net profit and retained earnings, in separate financial statement, are positive and the Company has adequate cash inflows over the requirements of cash outflows of operation and sustainable development. The cash dividends per annum should not be less than thirty (30) percent of the net profit of the Company in the current year.
  - (4) The Company may adjust its profits distribution policy referred to in sub-paragraphs (2) and (3) of this Article in case of war, natural disasters and other force majeure, or where changes to the external environment of the Company result in material impact on the production and operation of the Company, or where there are significant changes in the Company's own operations or financial conditions, or where the Company's board of directors considers it necessary. Independent directors shall issue independent opinions on the adjustment of profits distribution policy whilst the board of directors shall discuss the rationality of such adjustment in detail and form a resolution which shall be submitted to shareholders' meeting for approval by special resolution. The convening of shareholders' meeting shall comply with regulatory provisions in the place where the Company's shares are listed.

- (5) The management of the Company shall formulate the annual profits distribution plan and submit such plan to the board of directors for consideration. Independent directors shall issue independent opinions on such plan and the board of directors shall form a resolution which shall be submitted for approval by shareholders' meeting. If the conditions for the distribution of cash dividends have been satisfied and the Company does not propose a cash dividends distribution plan or does not propose such plan in compliance with the sub-paragraph (3) of this Article, independent directors shall issue independent opinions whilst the board of directors shall give specific explanation regarding such arrangement and form a resolution which shall be submitted to shareholders' meeting for approval and make relevant disclosures. The plan for half-yearly dividends distribution of the Company shall comply with Article 182 of the Articles of Association.
- Article 182 The Company shall calculate, declare and pay dividends and other amounts which are payable to holders of A Shares in Renminbi. The Company shall calculate and declare dividends and other payments which are payable to holders of Overseas-Listed Foreign-Invested Shares in Renminbi, and shall pay such amounts in Hong Kong Dollars. As for the foreign currency needed by the Company for payment of cash dividends and other funds which are payable to the holders of the Overseas-Listed Foreign-Invested Shares, it shall be handled in accordance with any related national regulations on foreign exchange control.
- Article 183 Unless otherwise provided by the relevant laws and administrative regulations, as regards dividends and other amounts payable in Hong Kong dollars, the applicable exchange rate shall be the average benchmark rate for the relevant foreign currency determined by the Peoples' Bank of China and announced by the State Administration of Foreign Exchange during the week prior to the announcement of payment of dividend and other amounts.
- **Article 184** Unless the shareholders have approved otherwise in a general meeting, the board of directors may determine to make half-yearly dividends distribution. Unless otherwise provided by the relevant laws and administrative regulations, the amount of the half-yearly dividends distribution shall not exceed 50% of net profit for the half year interim period.
- **Article 185** In the event of allocating the dividends to shareholders of the Company, the payable taxes on the dividend incomes of the shareholders shall be withdrawn in accordance with the requirements of Taxation Law of China and in consideration of the allocated sum.
- **Article 186** The Company shall appoint receiving agents for holders of the Overseas-Listed Foreign-Invested Shares. Such receiving agents shall receive dividends which have been declared by the Company and all other amounts which the Company should pay to holders of Overseas-Listed Foreign-Invested Shares on such shareholders' behalf.

The receiving agents appointed by the Company shall meet the relevant requirements of the laws of the place at which the stock exchange on which the Company's shares are listed or the relevant regulations of such stock exchange.

The receiving agents appointed for holders of Overseas-Listed Foreign-Invested Shares listed in Hong Kong shall each be a company registered as a trust company under the Trustee Ordinance of Hong Kong.

**Article 187** The Company adopts the system of internal auditing and hires professional auditors to undertake internal auditing of the Company's financial income and expenditure and economic activities.

**Article 188** The Company's internal auditing system and duties of the auditors shall be implemented after they have been approved by the board of directors. The person in charge of audit shall be responsible to and report to the board of directors.

#### CHAPTER 16 APPOINTMENT OF ACCOUNTING FIRMS

**Article 189** The Company shall appoint an independent firm of accountants which is qualified under the relevant regulations of the State to audit the Company's annual financial report and review other financial reports of the Company.

The first accounting firm of the Company may be appointed by the founders' meeting before the first annual shareholders' meeting. The term of appointment of the accounting firm shall terminate at the end of the first shareholders' annual meeting.

If the founders' meeting does not exercise its duties and powers according to the aforementioned provisions, then the board of directors shall exercise its duties and powers.

- **Article 190** The auditors appointed by the Company shall hold office from the conclusion of the annual general meeting of shareholders at which they were appointed until the conclusion of the next annual general meeting of shareholders.
- **Article 191** The auditors appointed by the Company shall enjoy the following rights:
  - a right to review to the books, records and vouchers of the Company at any time, the right to require the directors, supervisors, and senior management personnel of the Company to supply relevant information and explanations;
  - (2) a right to require the Company to take all reasonable steps to obtain from its subsidiaries such information and explanation as are necessary for the discharge of its duties;
  - (3) a right to attend shareholders' general meetings and to receive all notices of, and other communications relating to, any shareholders' general meeting which any shareholder is entitled to receive, and to speak at any shareholders' general meeting in relation to matters concerning its role as the Company's accounting firm.
- **Article 192** If there is a vacancy in the position of the accounting firm, the board of directors may appoint an accounting firm to fill such vacancy before the convening of the shareholders' general meeting. Any other accounting firm which has been appointed by the Company may continue to act during the period during which a vacancy arises.
- **Article 193** The shareholders in a general meeting may by ordinary resolution remove the accounting firm before the expiration of its term of office, irrespective of the provisions in the contract between the Company and the accounting firm. However, the right of the accounting firm in claiming for damages which arise from its removal shall not be affected thereby.
- Article 194 The remuneration of an accounting firm or the manner in which such firm is to be remunerated shall be determined by the shareholders in a general meeting. The remuneration of an accounting firm appointed by the board of directors which is to fill the vacancy shall be determined by the board of directors.
- **Article 195** The Company's appointment, removal or non-reappointment of an accounting firm shall be resolved by the shareholders in a general meeting. Such resolution shall be filed with the securities authority of the State Council.

Where a resolution at a general meeting of shareholders is passed to appoint an accounting firm other than an incumbent accounting firm, to fill a casual vacancy in the office of the accounting firm, to reappoint an accounting firm who was appointed by the board of directors to fill a casual vacancy or to remove an accounting firm before expiry of its term of office, the following provisions shall apply:

- (1) A copy of the appointment or removal proposal shall be sent (before issue of the notice of meeting) to the firm proposed to be appointed or proposing to leave its post or the firm which has left its post in the relevant fiscal year. Reference as leaving herein includes leaving by removal, resignation and retirement.
- (2) If the accounting firm leaving its post makes representations in writing and requests the Company to give the shareholders notice of such representations, the Company shall (unless the representations have been received too late) take the following measures:
  - (i) in any notice of the resolution given to shareholders, state the fact of the representations having been made by the accounting firm leaving its post; and
  - (ii) attach a copy of the representations to the notice and deliver it to the shareholders in the manner stipulated in the Company's Articles of Association and its appendices.
- (3) If the Company fails to circulate the accounting firm's representations in the manner set out in sub-paragraph (2) above, such accounting firm may (in addition to its right to be heard) require that the representations be read out at the meeting.
- (4) An auditor which is retired from its office shall be entitled to attend the following shareholders' general meetings:
  - (i) the general meeting at which its term of office would otherwise have expired;
  - (ii) the general meeting at which it is proposed to fill the vacancy caused by its removal; and
  - (iii) the general meeting which convened as a result of its voluntary resignation:

The leaving accounting firm has the right to receive all notices of, and other communications relating to, any such meeting, and to speak at any such meeting which it attends on any part of the business of the meeting which concerns it as the former accounting firm of the Company.

Article 196 Prior notice should be given to the accounting firm 30 days in advance if the Company decides to remove such accounting firm or not to renew the appointment thereof. Such accounting firm shall be entitled to make representations at the shareholders' general meeting. Where the accounting firm resigns from its position as the Company's auditors, it shall make clear to the shareholders in a general meeting whether there has been any impropriety on the part of the Company.

An accounting firm may resign its office by depositing at the Company's domicile a resignation notice which shall become effective on the date of such deposit or on such later date as may be stipulated in such notice. Such notice shall contain the following statements:

- (1) a statement to the effect that there are no circumstances connected with its resignation which it considers should be brought to the notice of the shareholders or creditors of the Company; or
- (2) a statement of any such circumstances.

Where a notice is deposited under the preceding sub-paragraph, the Company shall within fourteen (14) days send a copy of the notice to the relevant governing authority. If the notice contains a statement under the preceding sub-paragraph (2), a copy of such statement shall be placed at the Company for shareholders' inspection. The Company should also send a copy of such statement by prepaid mail to every shareholder of Overseas-Listed Foreign Shares at the address registered in the register of shareholders.

Subject to the laws, regulations and listing rules of the listing place, the aforesaid copies may be issued or provided by way of the methods provided in Article 219 of the Articles of Association , but need not be issued or provided by the abovementioned ways.

Where the accounting firm's notice of resignation contains a statement in respect of the above, it may require the board of directors to convene a shareholders' extraordinary general meeting for the purpose of receiving an explanation of the circumstances connected with its resignation.

# CHAPTER 17 EMPLOYEES

- Article 197 The Company perseveres in a human-centered principle and integrates the corporate development with a perpetual intention to return to shareholders, contribute to the society, and benefit the employees. In compliance with the State's laws and regulations, the Company shall establish a healthy and complete employee's management system and effectively develop and utilize human resources.
- **Article 198** Based on its business needs subject to laws, regulations and corporate rules, the Company shall employ, dismiss or terminate employees labor contracts in its discretion.
- Article 199 Pursuant to the State's regulations and the Articles of Association and its appendices, the Company shall establish the salary, insurance, benefits systems. In light of the economic and social development and business operations of the Company, the Company shall make endeavors to enhance the overall benefits for its employees, and improve their working conditions.
- **Article 200** Pursuant to the State's laws and regulations, the Company shall develop an employees training system based on its business development and employees needs, to best pave the path for employees talent and professional development.

#### **CHAPTER 18 THE UNION**

**Article 201** The employees of the Company shall duly organize the Union, develop its event programs, and hence, protect the employees' legitimate rights. The Company shall provide prerequisites for the Union to carry out its events.

#### CHAPTER 19 MERGER AND DIVISON

Article 202 The Company may carry out mergers or division in accordance with law.

In the case of merger or division of the Company, the board of directors shall provide the proposal, and, upon approval in accordance with the procedures under the Articles of Association and its appendices, deal with the relevant approval procedures pursuant to laws. The board of directors of the Company shall take necessary measures to protect the legitimate interests of the shareholders who object to the plan of merger or division. A shareholder who objects to the plan of merger or division shall have the right to demand the Company or the shareholders who consent to the plan of merger or division to acquire such dissenting shareholders' shareholding at a fair price.

The contents of the resolution of merger or division of the Company shall constitute special documents which shall be available for inspection by the shareholders of the Company. Such special documents shall be sent by mail to holders of Overseas-Listed Foreign-Invested Shares.

Subject to the laws, regulations and listing rules of the listing place, the aforesaid documents may be issued or provided by way of the methods provided in Article 219 of the Articles of Association, but need not be issued or provided by the abovementioned ways.

**Article 203** The merger of the Company may take the form of either merger by absorption or merger by the establishment of a new company.

The merger means that one company takes over other one and the company being taken over shall be dissolved. The consolidation means that at least two companies are merged into one and the existing companies shall be dissolved after their merger.

In the event of a merger, the merging parties shall execute a merger agreement and prepare a balance sheet and an inventory of assets. The Company shall notify its creditors within ten (10) days from the date of the Company's merger resolution which is passed and shall publish a public notice in a newspaper designed by the regulatory institutions of the place where the Company's shares are listed within thirty (30) days of the date of the Company's merger resolution. The creditor may, within 30 days as of its acknowledgement or within 45 days as of the date of announcement, ask the Company for settling of its debt or providing relevant guarantee.

**Article 204** Where there is a division of the Company, its assets shall be divided up accordingly.

In the event of division of the Company, the parties to such division shall execute a division agreement and prepare a balance sheet and an inventory of assets. The Company shall notify its creditors within ten (10) days from the date of the Company's division resolution which is passed and shall publish a public notice in a newspaper designed by the regulatory institutions of the place where the Company's shares are listed within thirty (30) days of the date of the Company's division resolution.

Article 205 After the merger, the rights against debtors and the indebtedness of each of the parties to the merger shall be inherited by the company which survives the merger or the newly established company.

Debts of the Company prior to division shall be severally and jointly assumed by the companies which exist after the division, provided that otherwise written agreements has been reached between the Company and the creditor upon the insolvency of debts.

Article 206 The Company shall, in accordance with law, apply for change in its registration with the companies registration authority where a change in any item in its registration arises as a result of any merger or division. Where the Company is dissolved, the Company shall apply for cancellation of its registration in accordance with law. Where a new company is established, the Company shall apply for registration thereof in accordance with law.

#### CHAPTER 20 DISSOLUTION AND LIQUIDATION

**Article 207** The Company shall be dissolved and liquidated upon the occurrence of any of the following events:

- (1) a resolution regarding the dissolution is passed by shareholders at a general meeting;
- (2) dissolution is necessary due to a merger or division of the Company;
- (3) the Company is legally declared insolvent due to its failure to repay debts as they become due; and
- (4) business license is revoked lawfully and its operation is ceased or canceled by the relevant authorities;
- (5) The company meets with great difficulties and its continuation may incur great loss to the interest of the shareholders, it cannot be resolved by other means and the shareholders holding more than 10% of the voting share may petition to the people's court for its dissolution.

Article 208 Where the Company is dissolved under sub-paragraph (1), (4) or (5) of the preceding paragraph, a liquidation committee shall be set up within fifteen (15) days thereafter and commence the liquidation proceedings, and the liquidation committee of the Company shall be composed of directors or any other persons determined by the shareholders' general meeting. Where a liquidation committee is not established according to schedule, the creditor may apply to the People's Court to organize the relevant personnel to establish a liquidation committee to proceed the liquidation.

Where the Company is dissolved under sub-paragraph (3) of the preceding Article, the People's Court shall in accordance with the provisions of relevant laws organize the shareholders, relevant organizations and relevant professional personnel to establish a liquidation committee to proceed the liquidation.

Article 209 Where the board of directors proposes to liquidate the Company for any reason other than the Company's declaration of its own insolvency, the board shall include a statement in its notice convening a shareholders' general meeting to consider the proposal to the effect that, after making full inquiry into the affairs of the Company, the board of directors is of the opinion that the Company will be able to pay its debts in full within twelve (12) months from the commencement of the liquidation.

Upon the passing of the resolution by the shareholders in a general meeting in relation to the liquidation of the Company, all duties and powers of the board of directors shall cease.

The liquidation committee shall act in accordance with the instructions of the shareholders' general meeting to make a report at least once every year to the shareholders' general meeting on the committee's income and expenses, the business of the Company and the progress of the liquidation; and to present a final report to the shareholders' general meeting on completion of the liquidation.

Article 210 The liquidation committee shall, within ten (10) days of its establishment, send notices to creditors and shall, within sixty (60) days of its establishment, publish a public announcement in a newspaper designed by the regulatory institutions of the place where the Company's shares are listed. The creditors who have received the notice shall, within 30 days as of its acknowledgement of the receipt, and the creditors who fail to receive the notice shall within 45 days as of the date when the announcement was made, declare their creditor's right to the liquidation team.

The creditor who declares the creditor's right shall state the relevant matter in relation to the debt, and provide evidentiary materials. The liquidation committee shall register the creditors' rights.

During liquidation period, the liquidation committee shall not settle any debt with the creditor.

- Article 211 During the liquidation period, the liquidation committee shall exercise the following functions and powers:
  - (1) to categorise the Company's assets and prepare a balance sheet and an inventory of assets respectively;
  - (2) to notify the creditors or to publish public announcements;
  - (3) to dispose of and liquidate any unfinished businesses of the Company;
  - (4) to pay all outstanding taxes and taxes incurred during the liquidation proceedings;
  - (5) to settle claims and debts;
  - (6) to deal with the surplus assets remaining after repayment by the Company of its debts;
  - (7) to represent the Company in any civil proceedings.
- Article 212 After it has categories the Company's assets and after it has prepared the balance sheet and an inventory of assets, the liquidation committee shall formulate a liquidation plan and present it to a shareholders' general meeting or to the people's court for confirmation.

The remaining asset shall, after having paid the liquidation expense, salary of the staff, social insurance expense and the legal premium, the arrears and liquidated the Company's debt, be distributed in accordance with the provisions of the fourth paragraph of this article.

The Company may, during the liquidation period, remain, but shall not carry out activities irrelevant to the liquidation. Where the Company's assets have been cleaned off without abiding by the preceding provisions, it shall be allocated to the shareholders.

Any surplus assets of the Company remaining after its debts have been repaid in accordance with the provisions of the second paragraph of this article shall be distributed to its shareholders according to the class of shares and the proportion of shares held:

- (1) In case of the preferred shares, the allocation shall be first given to the holders of the preferred shares in accordance with the face value of the preferred shares; if it is insufficient to repay the preferred shares, the allocation shall be carried out in accordance with the proportions of the preferred shares held by them respectively;
- (2) The allocation shall be carried out in accordance with proportions of shares held by the holders of ordinary shares.
- Article 213 Upon completion of the categorization of the Company's assets and preparation a balance sheet and an inventory of assets in connection with the liquidation of the Company, the liquidation committee discovers that the Company's assets are insufficient to repay the Company's debts in full, the liquidation committee shall immediately apply to the People's Court in accordance with laws for a declaration of insolvency.

After a Company is declared insolvent by a ruling of the People's Court, the liquidation committee shall transfer all matters arising from the liquidation to the People's Court.

Where a company is declared bankrupt according to law, it shall carry out bankruptcy liquidation according to the legal provisions concerning bankruptcy liquidation.

**Article 214** Following the completion of the liquidation, the liquidation committee shall prepare a liquidation report, a statement of income and expenses received and made during the liquidation period and a financial report, which shall be verified by a Chinese registered accountant and submitted to the shareholders' general meeting or the people's court for confirmation.

The liquidation committee shall, within thirty (30) days after the confirmation of the liquidation report by the shareholders' general meeting or the people's court, submit the documents referred to in the preceding paragraph to the companies registration authority and apply for cancellation of registration of the Company, and publish a public announcement relating to the termination of the Company.

**Article 215** The member of the liquidation team shall be faithful to their duty and fulfill the liquidation obligation in accordance with the law.

The member of the liquidation team shall not abuse their authority to accept bribery or other illegal income, not infringe the Company's assets.

Where the member of the liquidation team causes loss to the Company intentionally or because of gross negligence, he (she) shall bear the relevant compensation liability.

# CHAPTER 21 PROCEDURES FOR AMENDMENT OF THE COMPANY'S ARTICLES OF ASSOCIATION

- **Article 216** The Company may amend its Articles of Association and its appendices in accordance with the requirements of laws, administrative regulations and the Articles of Association and its appendices.
- **Article 217** The Company shall amend these Articles of Association and its appendices on the occurrence of any of the following events:

- (1) the Company Law or the relevant laws or administrative regulations are amended and the Articles of Association and its appendices are in conflict with the amended laws or administrative regulations;
- (2) there is change to the Company which makes it not consistent with these Articles of Association and its appendices;
- (3) it has been approved by the shareholders in a general meeting to amend these Articles of Association and its appendices.

Article 218 Any amendment of the Articles of Association and its appendices shall be made in the following manner:

- (1) The Board of Directors draw up a proposal for amendment of the Article of Association in accordance with these Articles of Association and its appendices;
- (2) The foregoing proposal shall be furnished to the shareholders in writing and a shareholders' meeting shall be convened:
- (3) The amendments shall be approved by a special resolution in a shareholders' general meeting.

The board of directors shall amend the Articles of Association and its appendices pursuant to the resolution of shareholders in a general meeting for amendment of these Articles of Association and its appendices and the approval opinions of the competent authority.

Amendment of the Articles of Association and its appendices involving the contents of the Mandatory Provisions shall become effective upon receipt of approvals from the companies approving department authorized by the State Council.

Article 219 If there is any change relating to the registered particulars of the Company, application shall be made for change in registration in accordance with law. If the amendment to the Articles of Association and its appendices is a matter which is required by the relevant laws and regulations to be disclosed, an announcement shall be made in accordance with the provisions of those laws and regulations.

#### **CHAPTER 22 NOTICE**

Article 220 Unless otherwise provided by the Articles and its appendices, subject to laws, regulations and listing rules of the place where the Company's shares are listed, notices of the Company shall be issued in any of the following manner: (1) by hand; (2) by post; (3) by public announcement; (4) any other manner as recognized by securities regulatory institutions at the place where the Company is listed or as provided in the Articles of Association.

If a notice of the Company is issued by public announcement, it shall be deemed received by the relevant officers once announced.

Unless otherwise provided in the Articles of Association and the appendices, subject to laws, regulations and listing rules of the place where the Company's shares are listed, any requirement under the Articles of Association and its appendices in relation to the delivery, e-mailing, mailing, distribution, announcement or the provision of any corporate communications, may be sent out or provided via the Company's website or through electronic method.

'Corporate Communications' refers to any documents issued or to be issued by the Company for the information or action of holders of any of its securities, including but not limited to:

(1) the directors' report, its annual accounts together with a copy of the auditors' report and , where applicable, its summary financial report;

- (2) the interim report and, where applicable, its summary interim report;
- (3) the notice of meeting;
- (4) listing documents;
- (5) a circular; and
- (6) a proxy form.
- **Article 221** If a notice of the Company is issued by hand, the date when the recipient signed or stamped to acknowledge receipt of the same shall be regarded as the date of service of the notice.

If a notice of the Company is issued by public announcement, the date of the first publication of the announcement shall be regarded as the date of service of the announcement. If sent by way of announcement via the corporate website, the sending date is deemed as the delivery date.

If the notice of the Company is sent out in electronic form, the sending date is deemed as the delivery date.

Subject to the laws, regulations and listing rules of the listing places, if a notice of the Company is sent by way of announcement via the website, the delivery date shall be regarded as follows:

- (1) on the date when the notice in accordance with the laws, regulations and listing rules of the listing places is sent to the intended recipient;
- (2) if later, the date on which the corporate communication first appears on the website after that notice is sent.

All notices which are to be sent by mail shall be clearly addressed, postage pre-paid, and shall be put into envelopes before being posted by mail. Such letters of notice shall be deemed to have been received by shareholders on the third working day since it is left with the post office.

**Article 222** If a notice of meeting is accidentally omitted to be sent to any person who is entitled to receive the same or that person has not received such a notice of meeting, it will not cause the meeting and any resolution made therein to be void.

#### **CHAPTER 23 RESOLUTION OF DISPUTES**

- **Article 223** The Company shall abide by the following principles for dispute resolution:
  - (1) Whenever any disputes or claims arise between: holders of the Overseas-Listed Foreign-Invested Shares and the Company; holders of the Overseas-Listed Foreign-Invested Shares and the Company's, directors, supervisors, senior management personnel; or holders of the Overseas-Listed Foreign-Invested Shares and holders of A Shares, in respect of any disputes or claims in relation to the affairs of the Company arising as a result of any rights or obligations arising from the Articles of Association and its appendices, the Company Law or other relevant laws and administrative regulations, such disputes or claims shall be referred by the relevant parties to arbitration

Where a dispute or claim of rights referred to in the preceding paragraph is referred to arbitration, the entire claim or dispute must be referred to arbitration, and all persons who have a cause of action based on the same facts giving rise to the dispute or claim or whose participation is necessary for the resolution of such dispute or claim, shall, where such person is the Company or the Company's shareholders, directors, supervisors, or senior management personnel, comply with the decisions made in the arbitration. Disputes in respect of the definition of shareholders and disputes in relation to the register of shareholders need not be resolved by arbitration.

- (2) A claimant may elect for arbitration to be carried out at either the China International Economic and Trade Arbitration Commission in accordance with its Rules or the Hong Kong International Arbitration Center in accordance with its Securities Arbitration Rules. Once a claimant refers a dispute or claim to arbitration, the other party must submit to the arbitral body elected by the claimant.
  - If a claimant elects for arbitration to be carried out at Hong Kong International Arbitration Center, any party to the dispute or claim may apply for a hearing to take place in Shenzhen in accordance with the Securities Arbitration Rules of the Hong Kong International Arbitration Center.
- (3) If any disputes or claims of rights are settled by way of arbitration in accordance with sub-paragraph (1) of this Article, the laws of the PRC shall apply, save as otherwise provided in the laws and administrative regulations.
- (4) The judgement of an arbitral body shall be final and conclusive and binding on all parties.

#### **CHAPTER 24 SUPPLEMENTARY**

- Article 224 The Articles of Association and its appendices are written in Chinese.. Where versions in other languages or different versions have different interpretations or meanings, the latest verified Chinese version registered in the State Administration for Industry & Commerce shall prevail.
- **Article 225** The expressions of "above", "within", "below" shall include the figures mentioned whilst the expressions of "short of", "without" and "less than" shall not include the figures mentioned.
- **Article 226** The right to interpret the Articles of Association vests with the board of directors of the Company, and the right to revise the Articles of Association vests with shareholders' general meeting.
- Article 227 If the Articles of Association are in conflict with the laws, administrative regulations or provisions of other regulatory documents or regulatory provisions in the place where the Company's shares is listed promulgated from time to time, the laws, administrative regulations and provisions of other regulatory documents or regulatory provisions in the place where the Company's shares is listed shall prevail.
- **Article 228** In the Articles of Association and its appendices, references to "accounting firm" shall have the same meaning as "auditors".

In the Articles of Association and its appendices, references to "president" shall have the same meaning as "manager" in the Company Law.

# LIST OF SUBSIDIARIES

A list of China Petroleum & Chemical Corporation's principal subsidiaries is provided in [Note 35] to the consolidated financial statements included in this annual report following Item 19.

# Certification by Principal Executive Officer Pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934, as amended

# I, Dai Houliang, certify that:

- 1. I have reviewed this annual report on Form 20-F of China Petroleum & Chemical Corporation;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;
- 4. The company's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
- 5. The Company's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of company's board of directors (or persons performing the equivalent function):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

Date: April 27, 2018

By: /s/ Dai Houliang

Dai Houliang, Vice Chairman and President

# Certification by Principal Financial Officer Pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934, as amended

# I, Wang Dehua, certify that:

- 1. I have reviewed this annual report on Form 20-F of China Petroleum & Chemical Corporation;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;
- 4. The Company's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
- 5. The Company's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of company's board of directors (or persons performing the equivalent function):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

Date: April 27, 2018

By: /s/ Wang Dehua

Wang Dehua, Chief Financial Officer

# Certification of CEO and CFO Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and Pursuant to Rule 13a-14(b) under the Securities Exchange Act of 1934, as amended (Exchange Act)

In connection with the Annual Report on Form 20-F of China Petroleum & Chemical Corporation (Company) for the year ended December 31, 2017 as filed with the Securities and Exchange Commission on the date hereof (Report), Wang Yupu, as Chairman of the Company, Dai Houliang, as President of the Company, and Wang Dehua, as Chief Financial Officer of the Company, each hereby certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, and Rule 13a-14 (b) under the Exchange Act, that, to the best of his knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Exchange Act; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By: /s/ Dai Houliang

Name: Dai Houliang

Title: Vice Chairman and President

Date: April 27, 2018

By: /s/ Wang Dehua

Name: Wang Dehua

Title: Chief Financial Officer

Date: April 27, 2018

This certification accompanies the Report pursuant to Rule 13a-14(b) under the Exchange Act and 18 U.S.C. Section 1350 and shall not be deemed "filed" by the Company for purposes of §18 of the Exchange Act, or otherwise subject to the liability of that section.

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